The Unified Plan and the Southeast Alaska Subarea Contingency Plan

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Spill Response in Alaska

- **Roughly 2,000 spills per year on the average**
- **DEC staff perform field visits/phone follow-ups to roughly 750-800 of these spills**
- **25-30 spills are considered "significant" with Situation Reports generated**
- **36 primary spill responders in DEC**

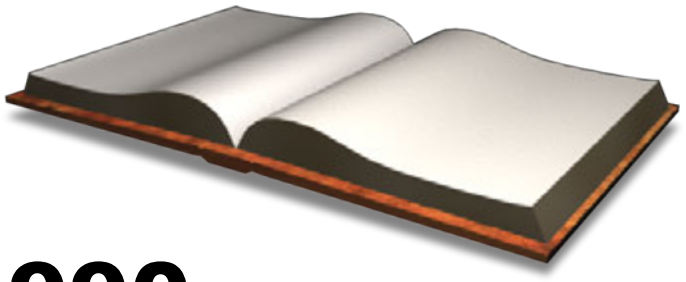
Vessel Spills in Southeast Alaska

Date	Spill Name/Location	Substance	Quantity
10/06/1987	Tanker Leak (Along West Coast)	ANS Crude Oil	600,000 gal
12/25/1979	M/V Lee Wang Zin (Revillagigedo Channel)	Bunker C Fuel	100,000+ gal
04/11/1986	Tank Barge Grounding (Wrangell Narrows)	Diesel	77,280 gal
04/08/1984	Tank Barge Grounding (Hydaburg)	Diesel	40,000 gal
11/15/1982	Tank Barge Grounding(Wrangell Narrows)	Diesel	32,631 gal
09/01/1988	Freight Ship Grounding (Dora Bay)	Diesel	30,000 gal
11/18/1982	Tank Barge Grounding(Frederick Sound)	Diesel	29,000 gal
09/15/1989	Fish Processor Vessel Sinking (Tongass Narrows)	Diesel	20,000 gal
11/05/2007	Samson Tug & Barge (Klawock)	Propane	17,800 lbs
10/27/1987	Tank Barge Grounding (Wrangell Narrows)	Diesel	16,597 gal
12/01/1995	Tugboat Tongass Sinking (Lynn Canal)	Diesel	15,000 gal
02/25/1987	Barge Callapooya Grounding (Hydaburg)	Diesel	9,000 gal
-4/18/1996	Cargo Barge Grounding (Hoonah)	Diesel	7,000 gal
07/26/2002	F/V Sinking (Prince of Wales Island)	Diesel	6,000 gal
04/17/1998	F/V Incident (Tenakee Inlet)	Diesel	5,000 gal
12/05/1973	Tank Barge Grounding (Sitka Sound)	Diesel	4,500 gal
01/26/1988	Tank Vessel Leak (Skagway)	Gasoline	3,000 gal
08/05/1979	Tank Barge Grounding (Sitka Sound)	Diesel	2,800 gal
08/24/2001	Fishing Vessel sinking (Sitka Area)	Diesel	2,500 gal

Other Notable Spills in Southeast Alaska

Date	Spill Name/Location	Substance	Quantity
04/09/1996	Ketchikan Pulp Company	Acid	125,000 gal
01/14/1994	Tank Farm Facility (Juneau)	Diesel	100,000 gal
12/24/2004	Greens Creek, Juneau	Process Water	72,000 gal
04/01/1983	Tank Farm Facility (Skagway)	Diesel	50,000 gal
01/26/1979	Ketchikan Pulp Co., Leaking Tank	Bunker C Fuel	38,000 gal
02/20/1995	Vehicle Accident, Juneau	Gasoline	13,125 gal
11/03/2002	Greens Creek, Juneau	Zinc Concentrate	8,000 lbs
04/23/2011	Greens Creek ,Juneau	Process Water	7,000 gal
02/05/1996	Petersburg Power Co., Valve Failure	Diesel	6,800 gal
09/25/2005	Greens Creek ,Juneau	Process Water	6,750 gal
05/01/1995	Douglas Residence, Home Heating Oil Tank	Diesel	5,000 gal
08/11/2005	Juneau, Tank Other	Asphalt	5,000 gal

Legal Mandates



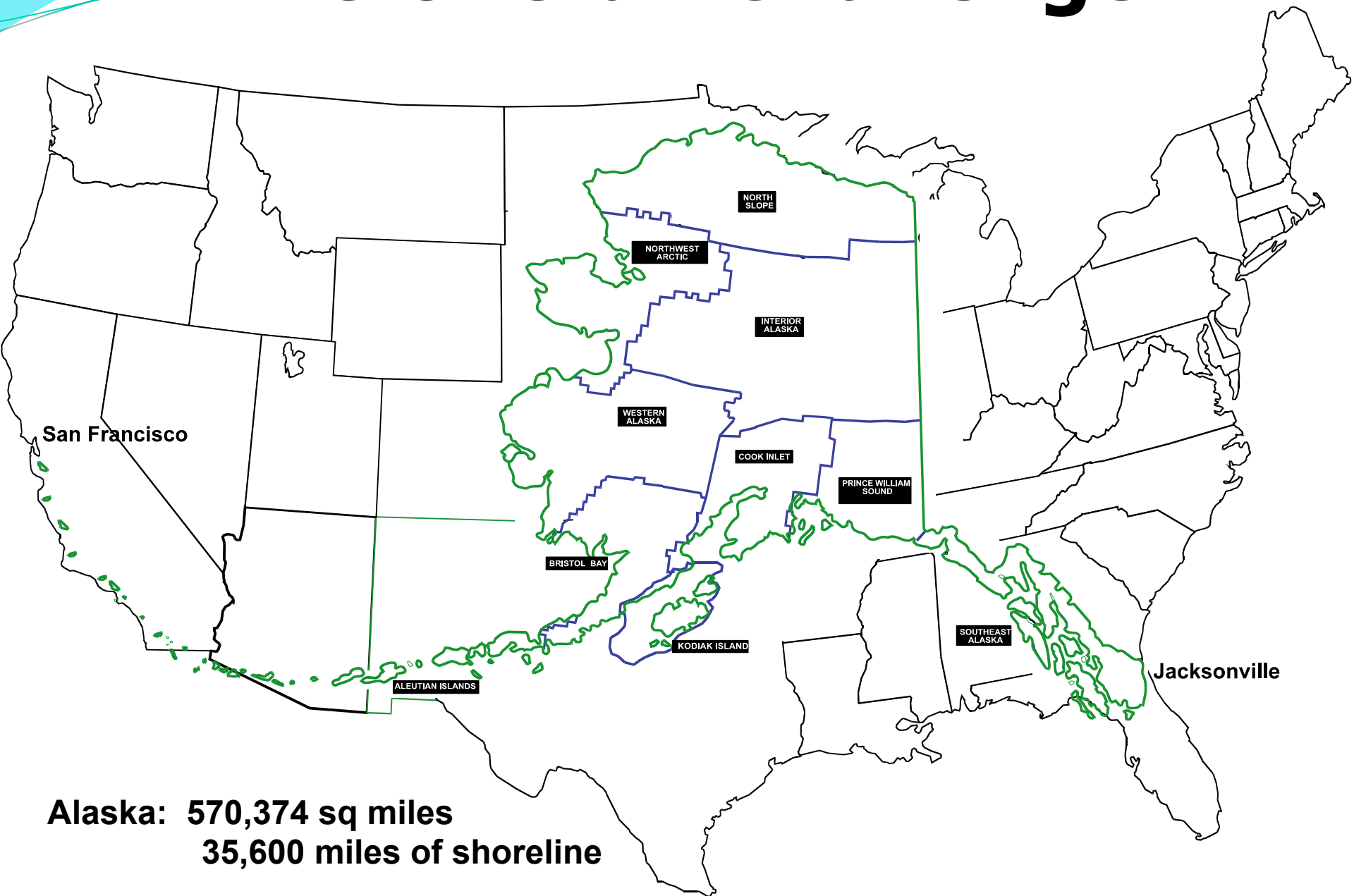
- Oil Pollution Act of 1990
- Clean Water Act
- Alaska Statutes & Regulations

Federal/State Planning Requirements

- **OPA 90 requires USCG and EPA to prepare the National Contingency Plan, plus develop Regional and Area Contingency Plans throughout the country**

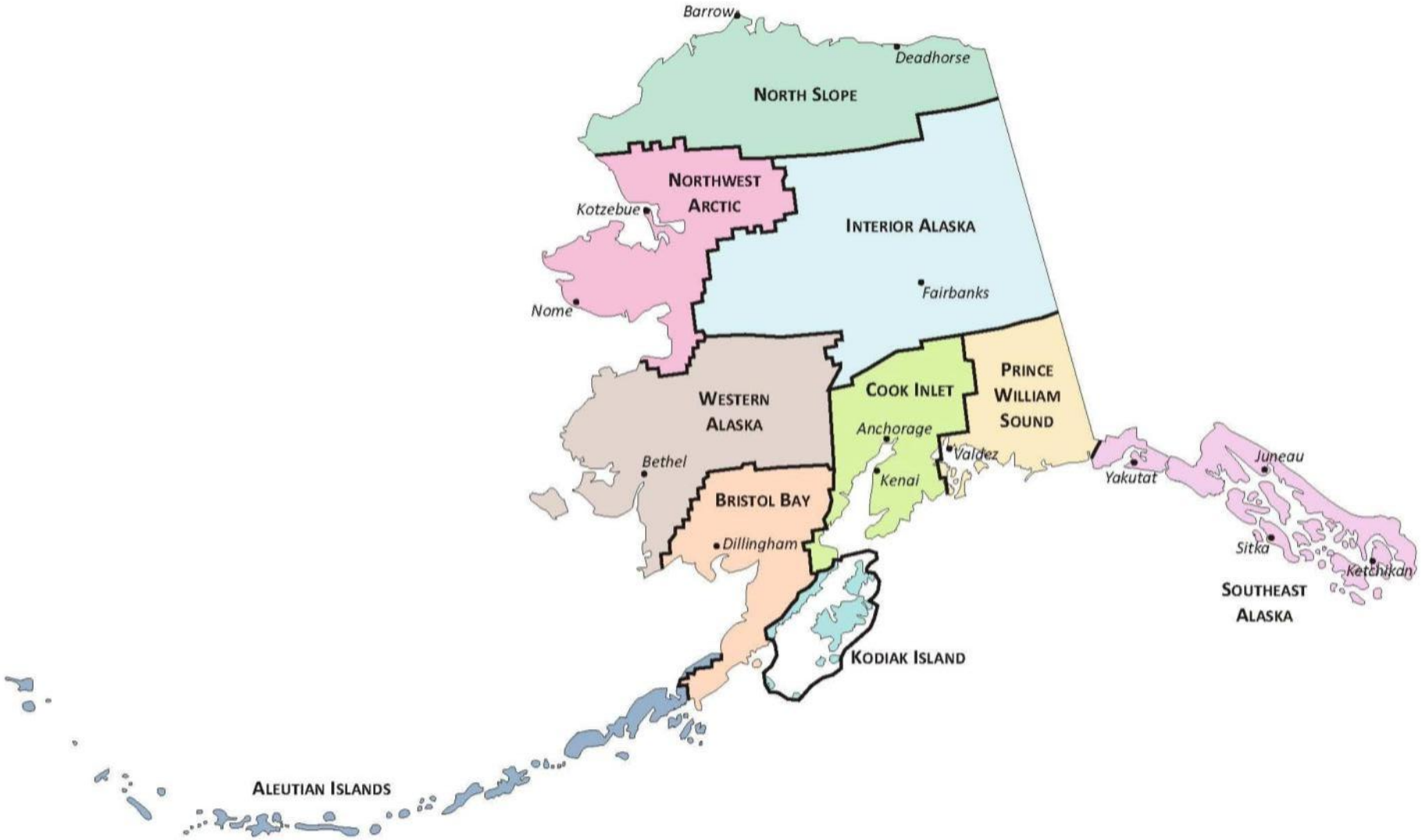
- **The Alaska Statute requires ADEC to develop a State Master Plan and 10 Regional Master Plans for the ten "regions" of the state.**

The Overall Challenge

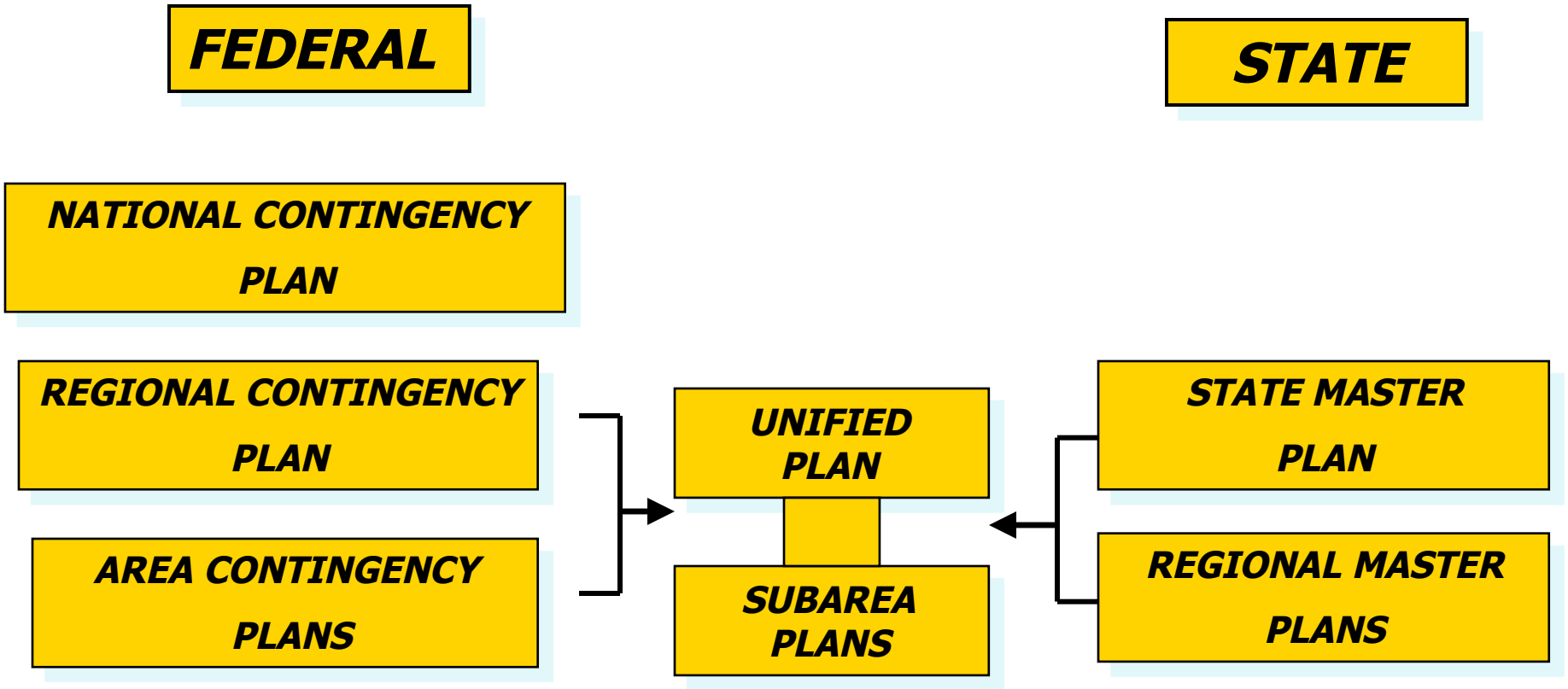


Alaska: 570,374 sq miles
35,600 miles of shoreline

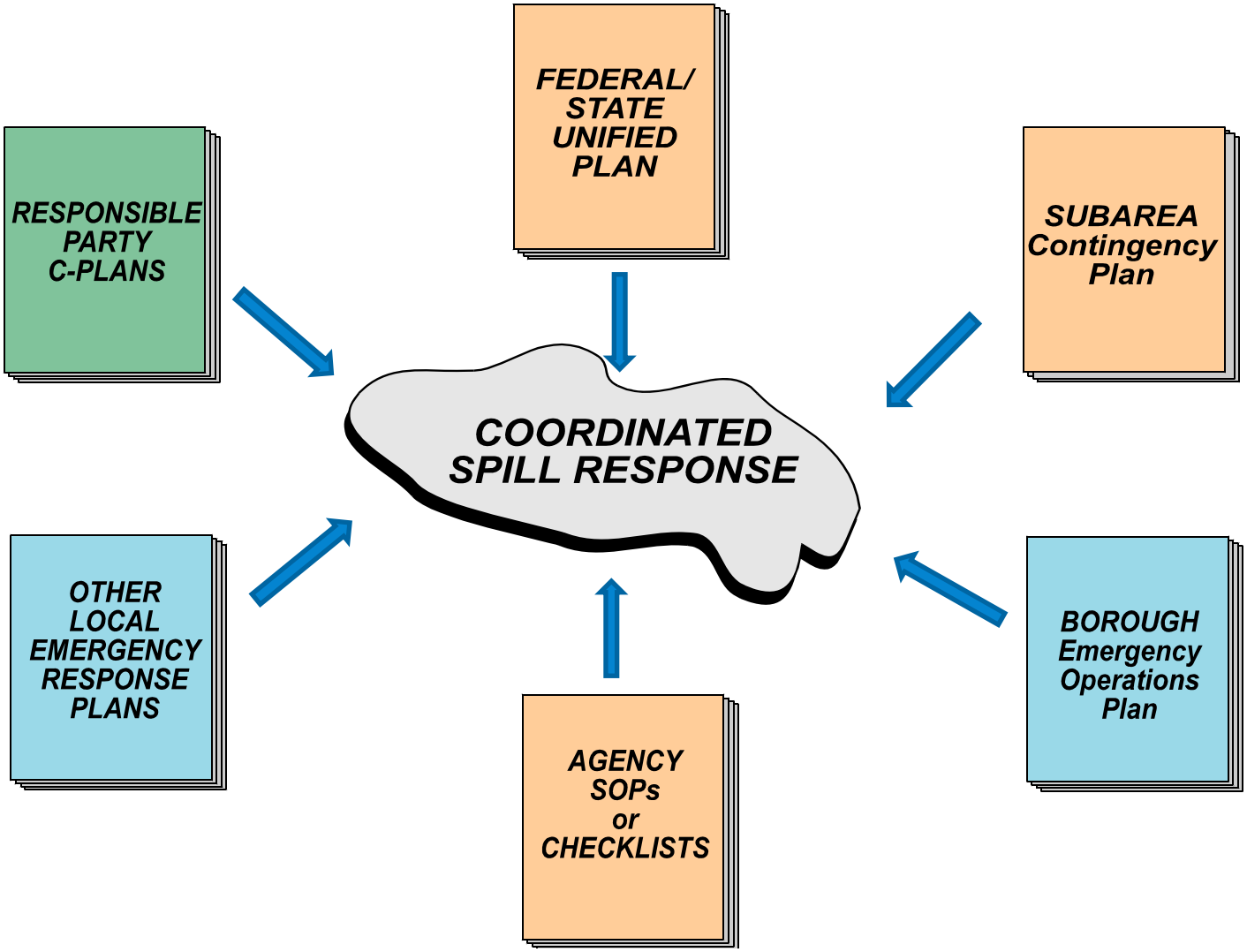
Unified Plan and 10 Subarea Plans

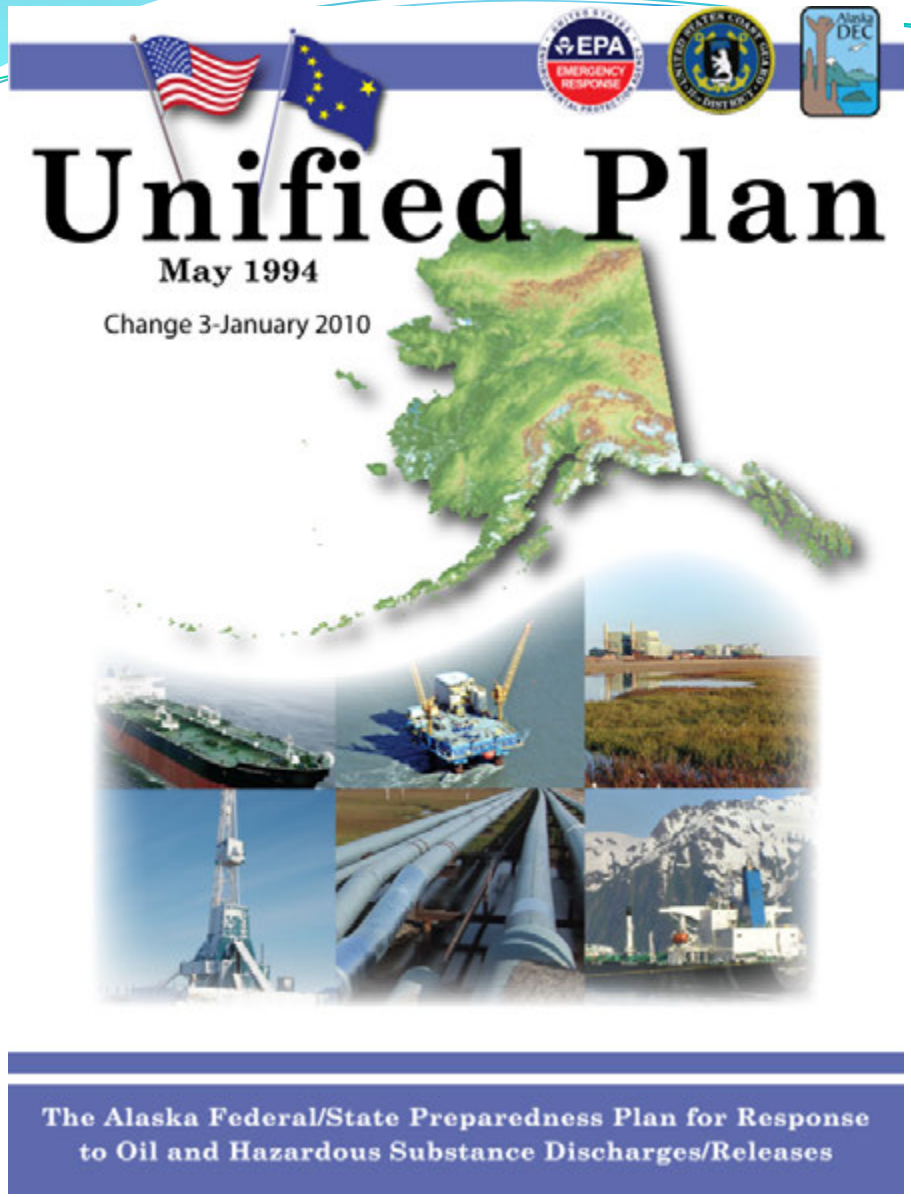


Joint Government Planning in Alaska



Integrated Response



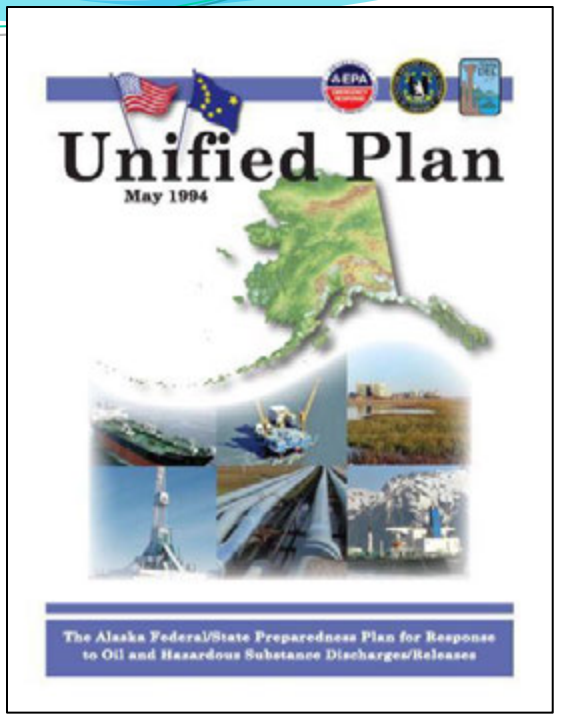


The Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance

Discharges/Releases

The Unified Plan

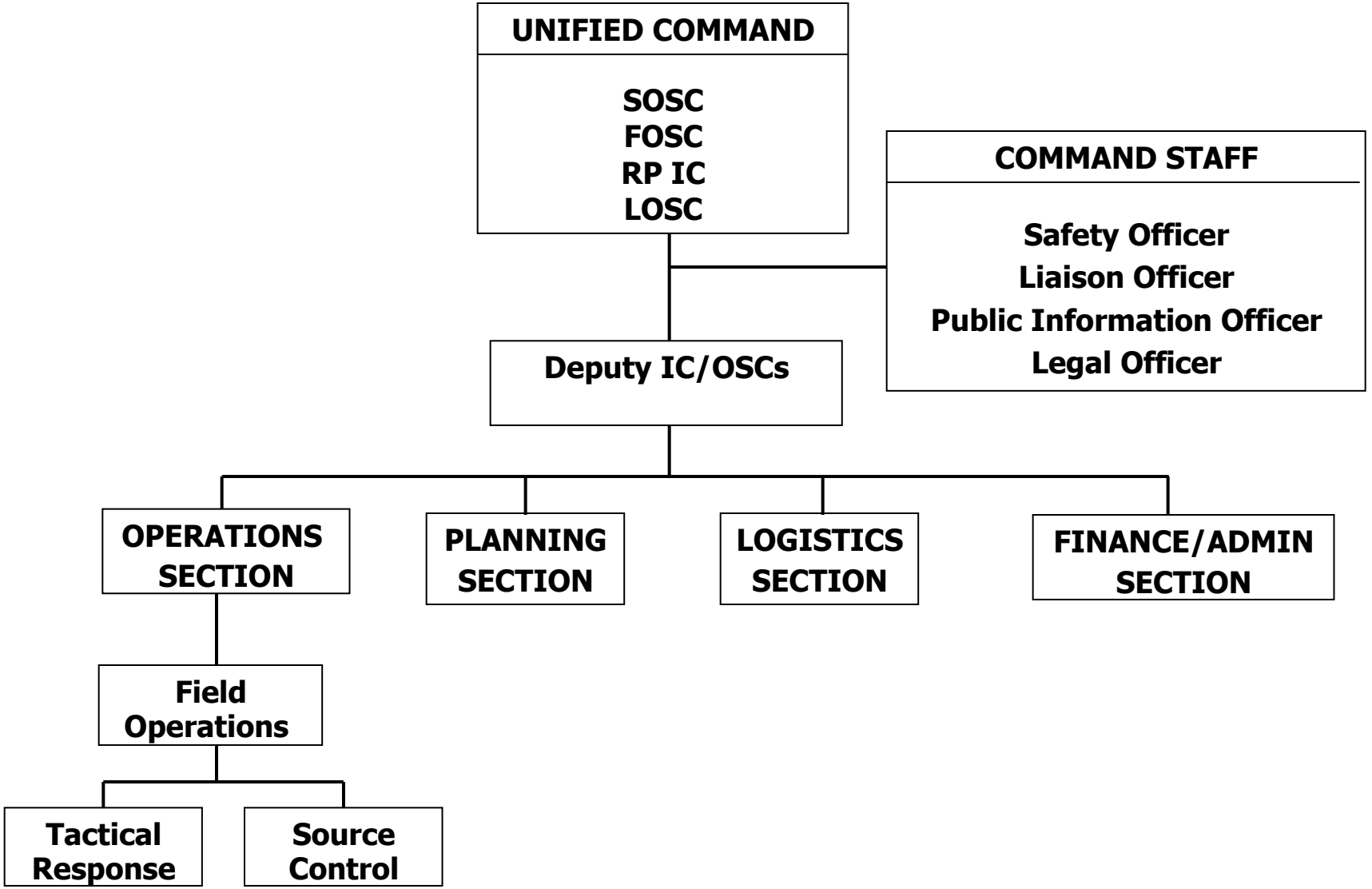
Unified Plan



- **Describes the strategy for a coordinated Federal, State, and local response to a discharge, or substantial threat of a discharge of oil or hazardous substance within Alaska.**

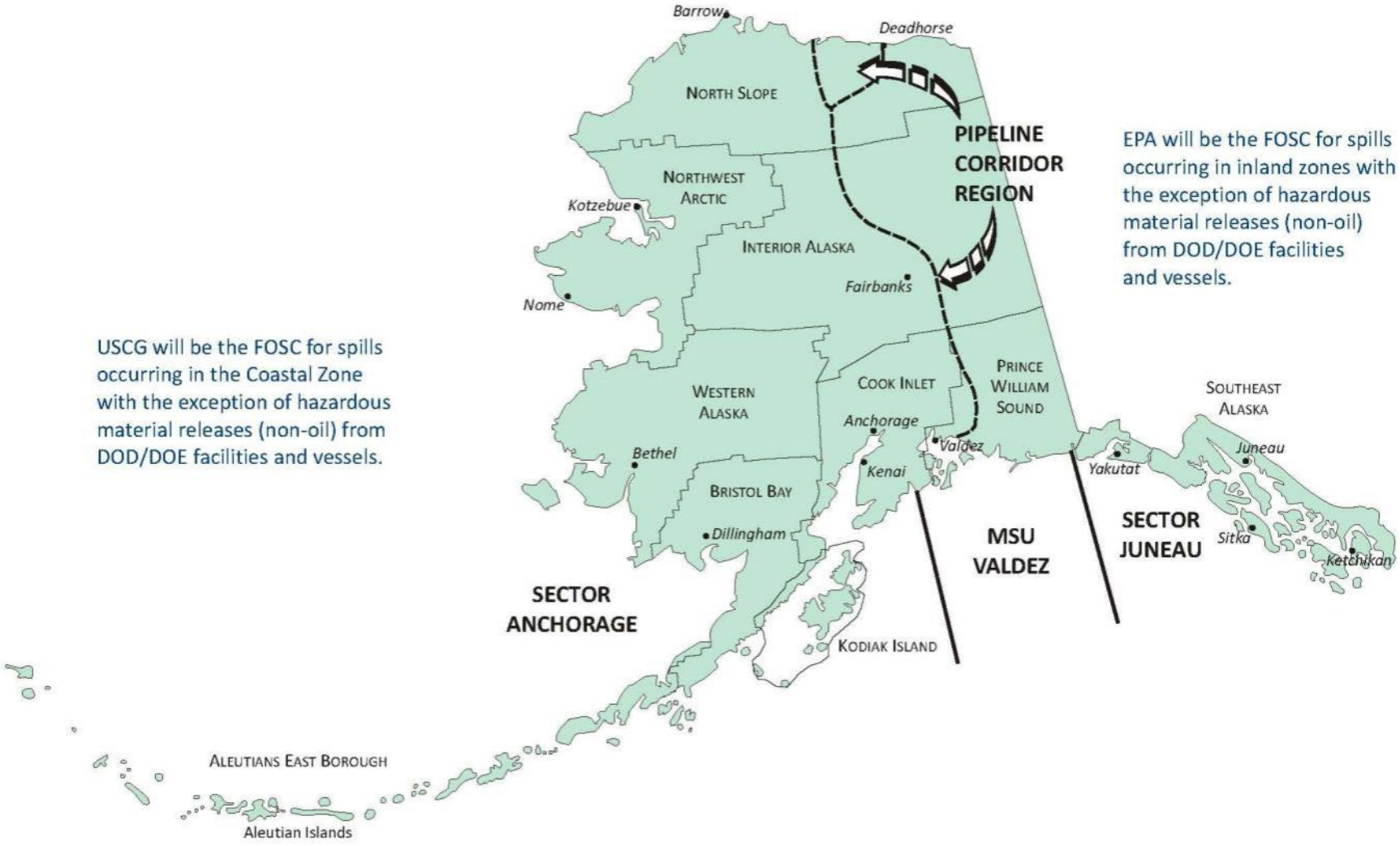
- **Provides information and guidance applicable to pollution responses within the entire State of Alaska including:**
  - **Emergency notification information**
  - **General emergency response procedures**
  - **18 Annexes, A-P, V and Z, by subject matter.**

Typical Response Organization

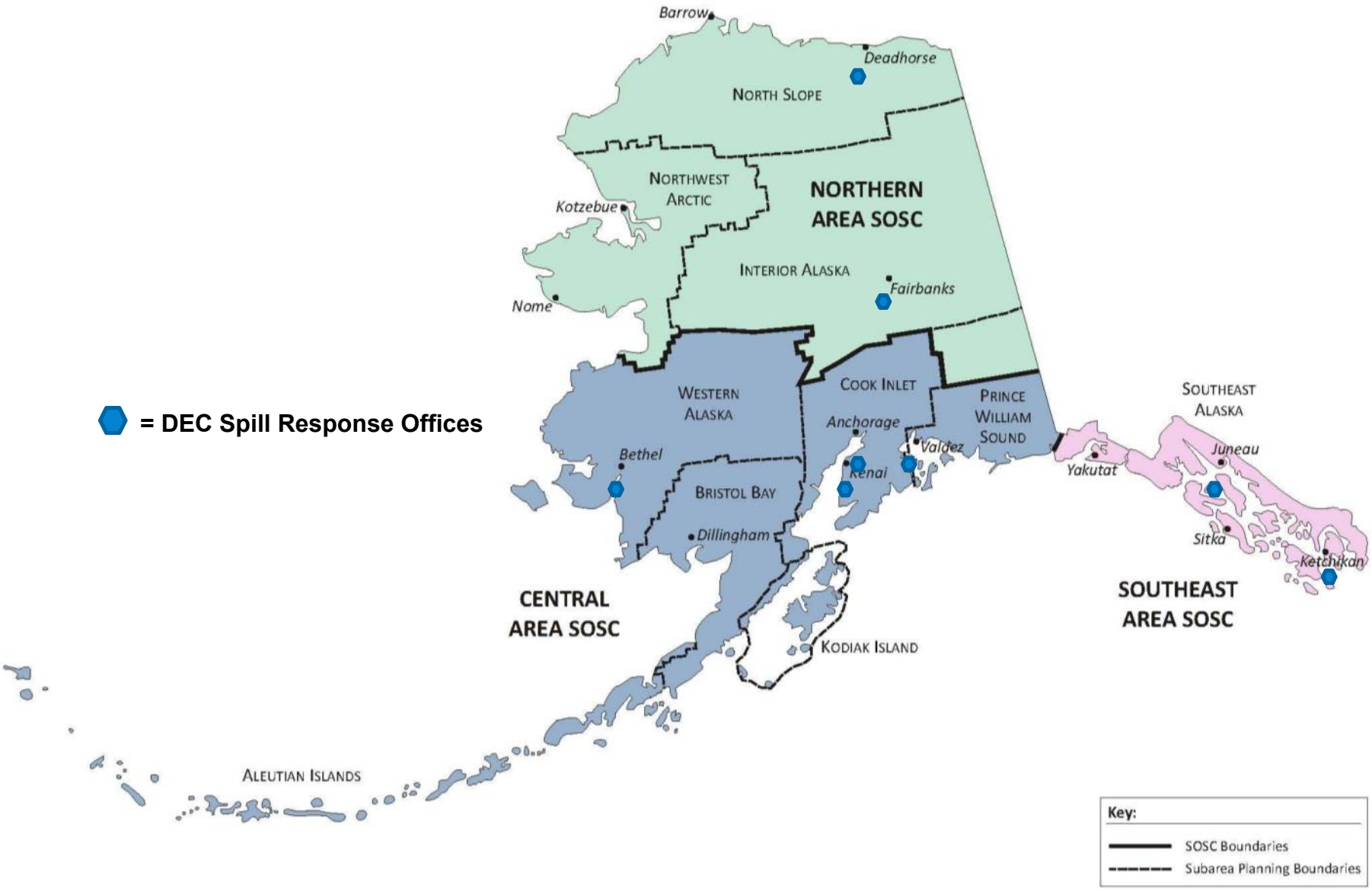


The FOSC Areas of Responsibility

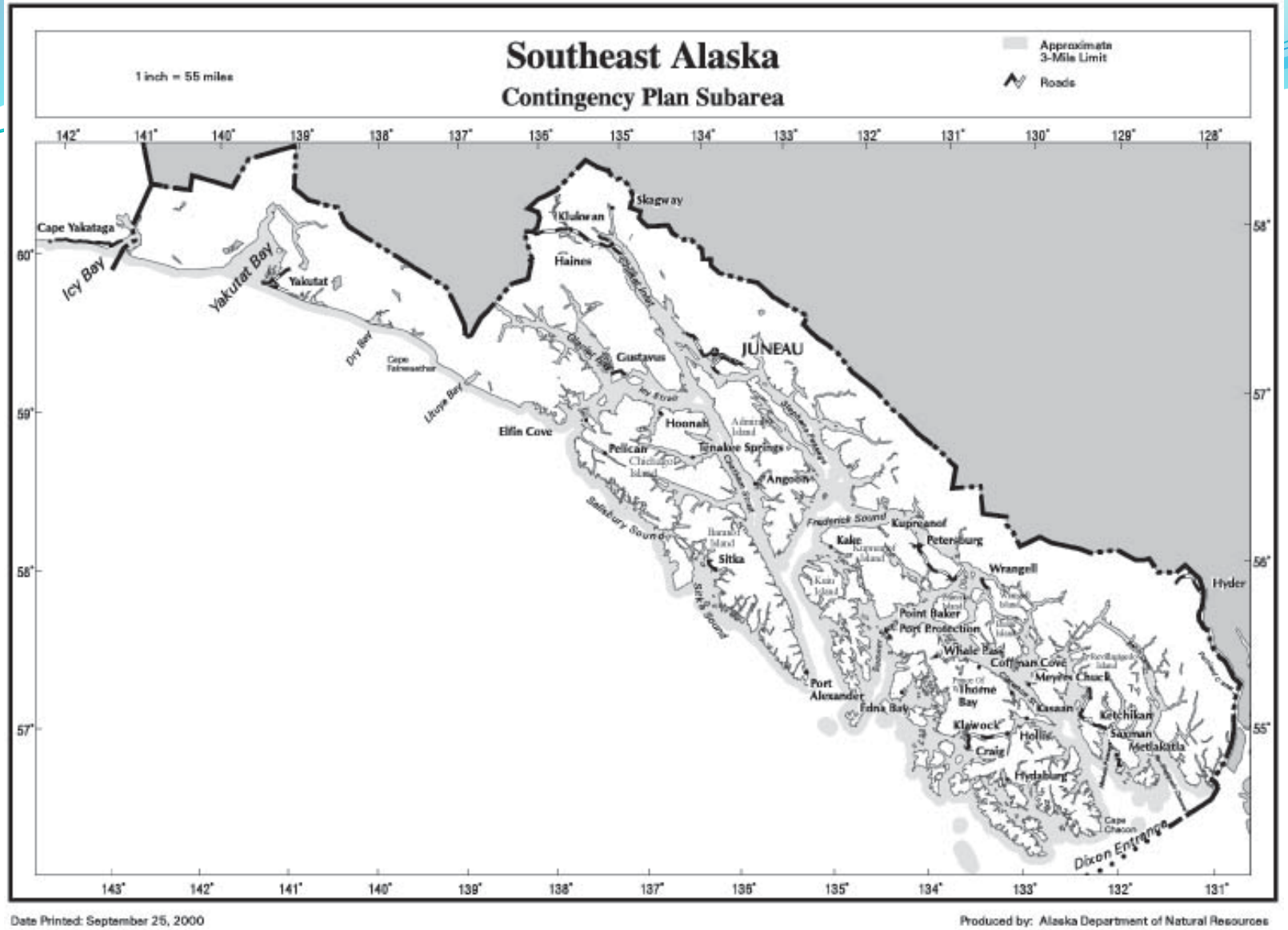
Pre-Designated Federal On-Scene Coordinators (FOSC) – Areas of Responsibility



The SOSC Areas of Responsibility



The Southeast Alaska Subarea Contingency Plan

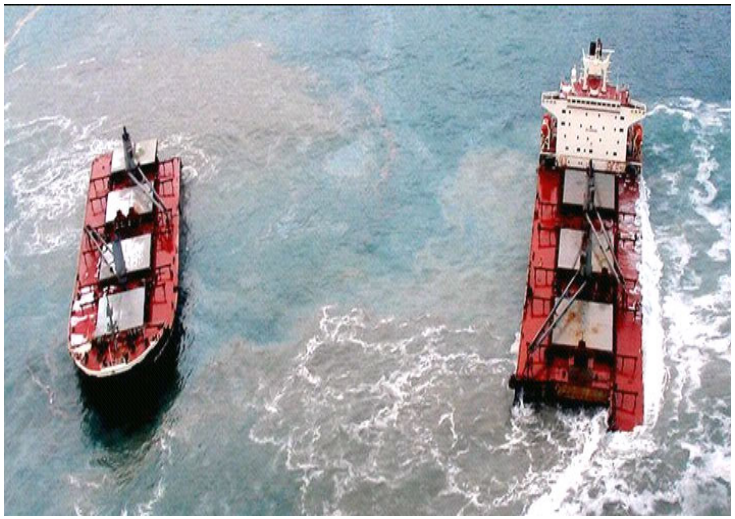


Southeast Alaska Region: that area of the state east of 142W longitude and south of a line just west of Icy Bay that connects the U.S.-Canadian border with the Gulf of Alaska, including adjacent shorelines and state waters, and having as its eastward boundary a line drawn in such manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured.

Local Government and Tribal Roles in Federal/State Planning

- **Tribal & Local Government Input is Critically Important to Federal/ State Plans**

- **Input Process includes Government to Government consultation, EPA questionnaires, and the public review process.**



Federal/State Spill Response Plans

Southeast SCP:

- A – Response
- B – Regional Resources
- C – HazMat
- D - Sensitive Areas
- E – Background
- F – Scenarios
- G - Geographic Response Strategies
- H – Specific PPORs

Unified Plan:

- Response Organization
- Administration
- Dispersants & ISB
- Wildlife Protection Guidelines
- Statewide Resources
- Hazmat, Radiological
- Health & Safety Guidelines
- Joint Information Center
- PPOR Guidelines
- Volunteer Guidelines

Potential Places of Refuge Section

- Two Critical Factors to Consider:
  - Sensitive Area Protection
  - Operational Needs

Potential Places of Refuge Section

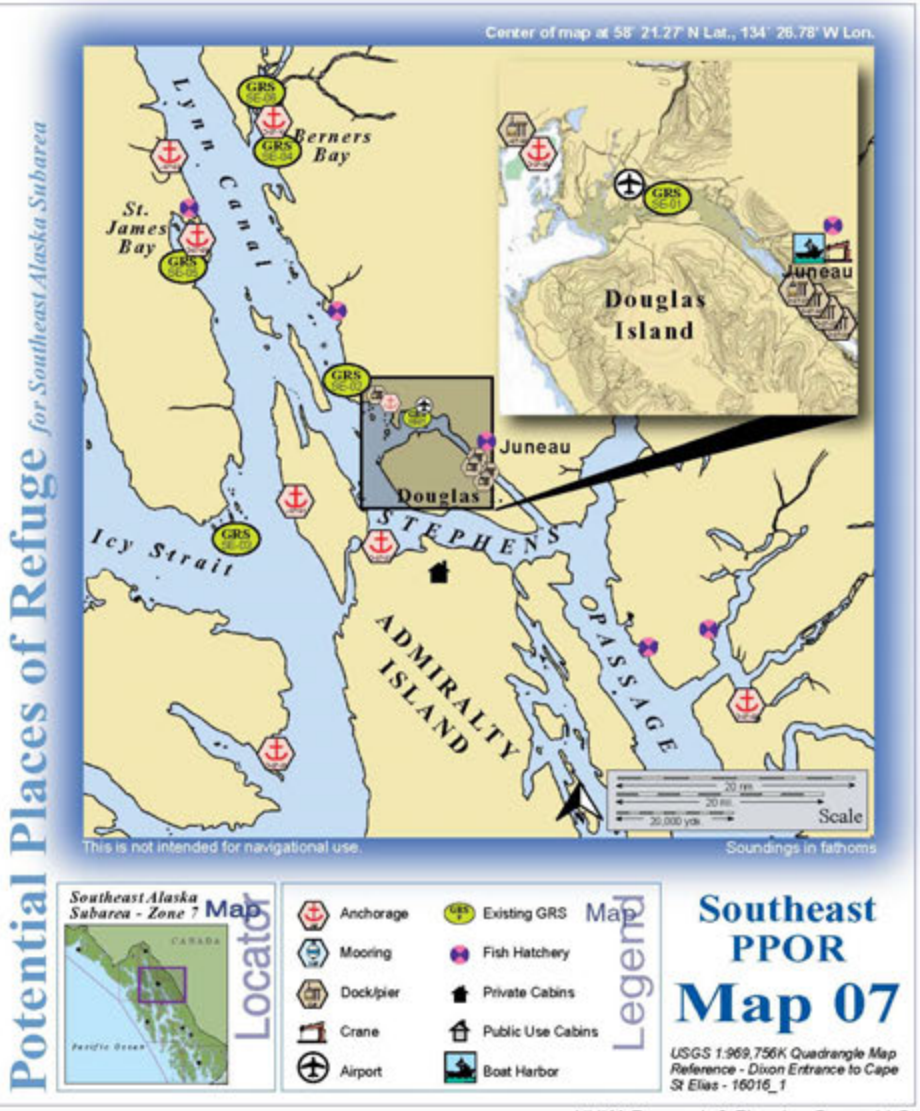
The Port of Juneau viewed from the south.

The Port of Juneau viewed from the northwest.

Auke Bay viewed from the southwest.

Funter Bay viewed from the southwest.

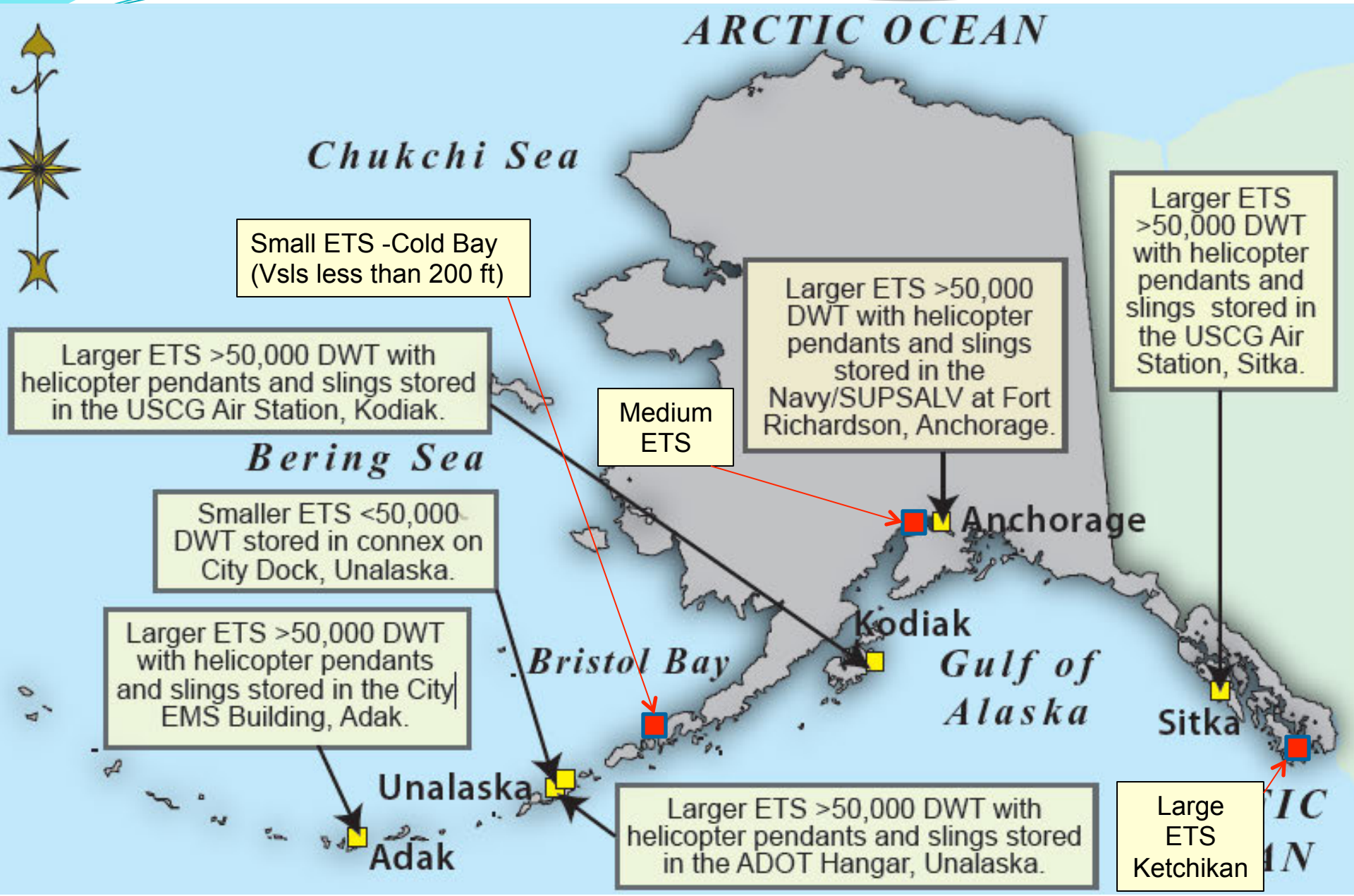
L-07-09 St. James Bay viewed from the south.



Off Shore Prevention Initiative: Emergency Towing System

A Successful ETS Employment: M/V Golden Seas (December 2010)

Emergency Towing Systems



Response Strategies and Tactics

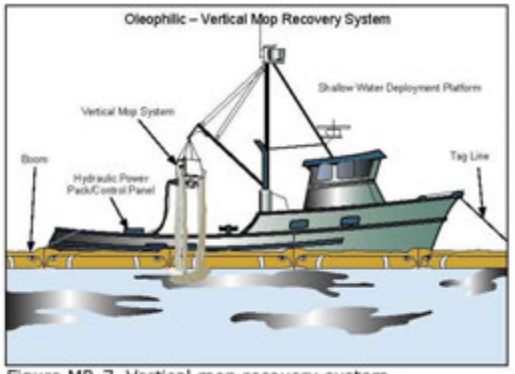
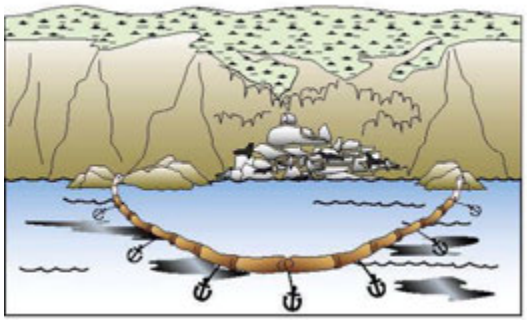


Figure MR-7. Vertical mop recovery system.



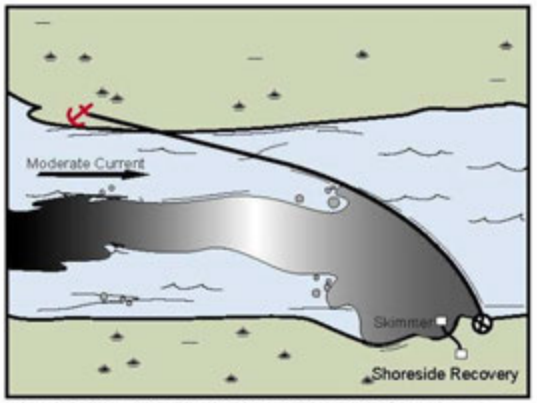


Figure DV-6. Single boom diversion configuration.

Nearshore Response Planning Initiative

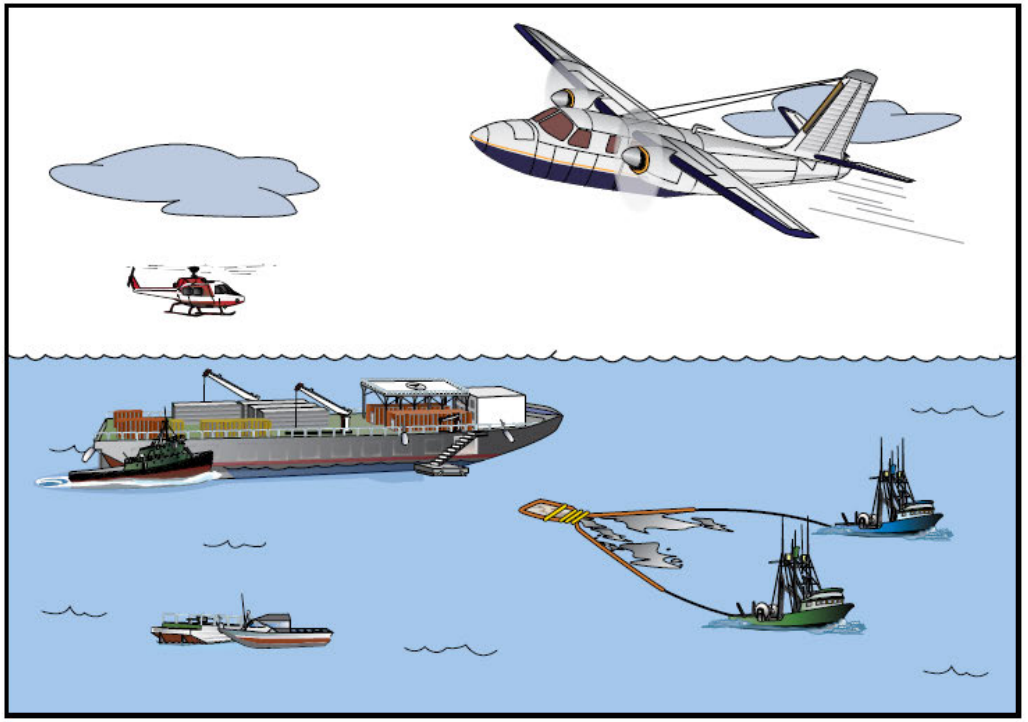
- **Goal: Protect State Resources from Impacts of Oil Spills (State Waters extend out to 3 miles from the shoreline)**

- **Objective: Develop Specific Nearshore Operations Response Strategy to supplement the STAR Manual**

Nearshore Operations Response Strategy

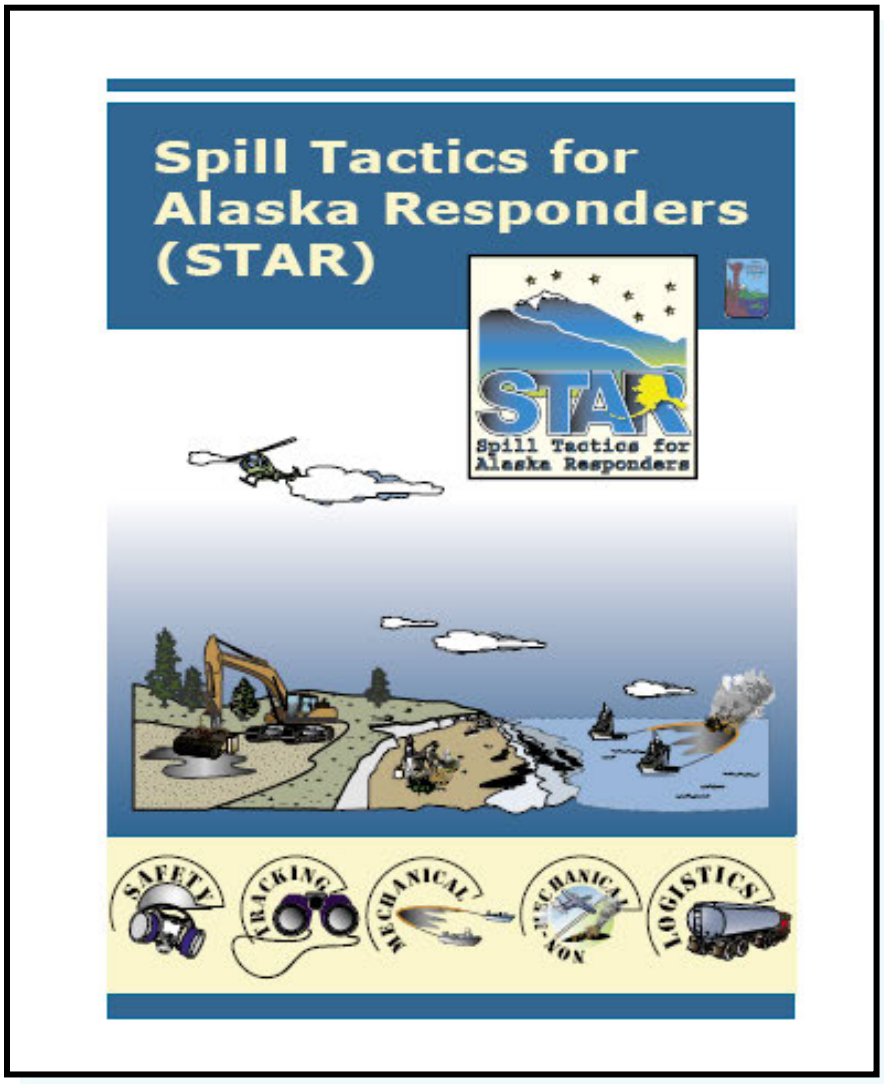
Complete System Approach:

- Support Barges and Tugs with crews
- Aerial Support
- Response Vessels with Equipment and Personnel
- Recovery Capacity (barge, (mini-barges, bladders)
- Re-Supply Issues for Fuel, Water, Food
- 24/7 Operation
- Shallow Water/Nearshore Considerations
- GRS Support from the Barge

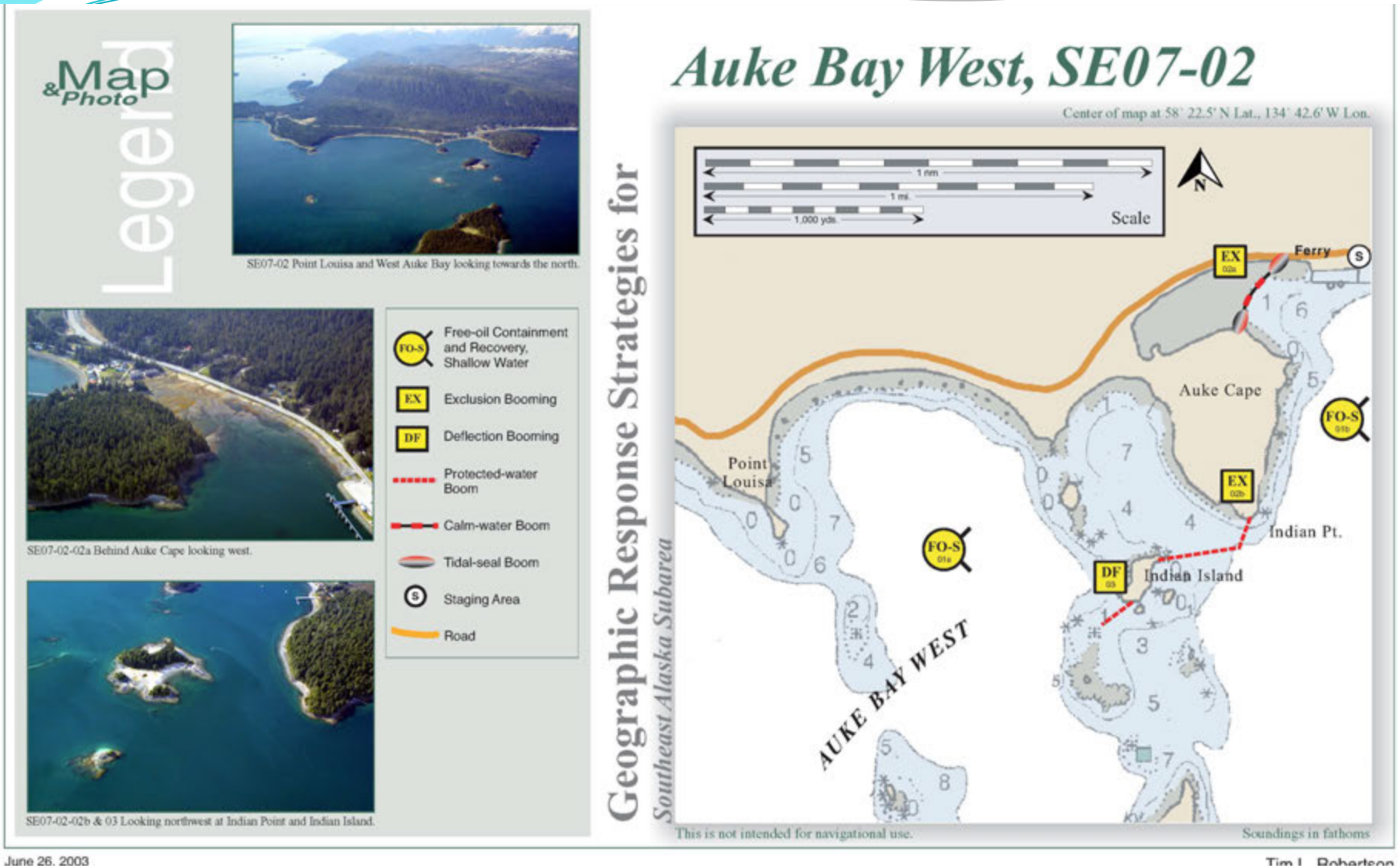


Nearshore Operations Response Strategy

- **Incorporate final document into updated Spill Tactics for Alaska Responders (STAR) Manual**
- **Completion Date: Spring 2013**
- **Begin subarea-specific planning for Nearshore Response, possibly beginning with the Aleutians**



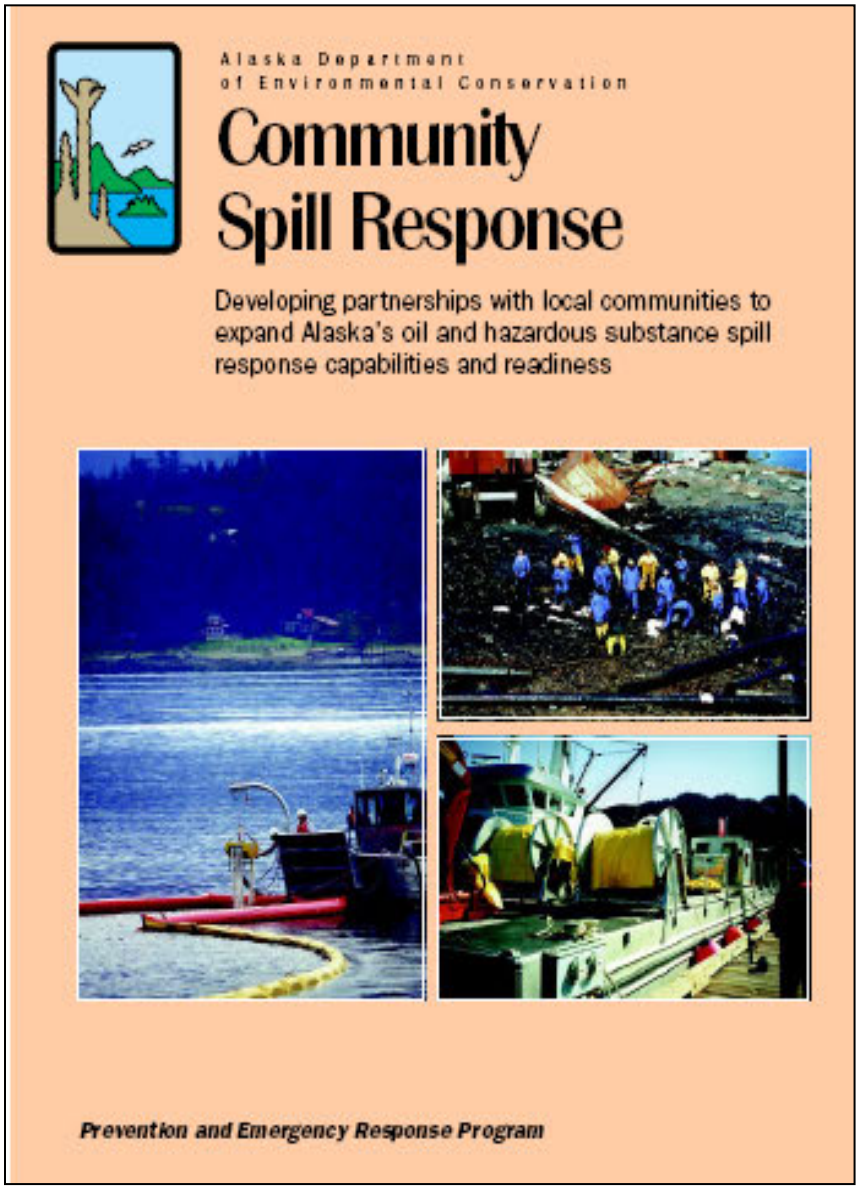
Geographic Response Strategies Section



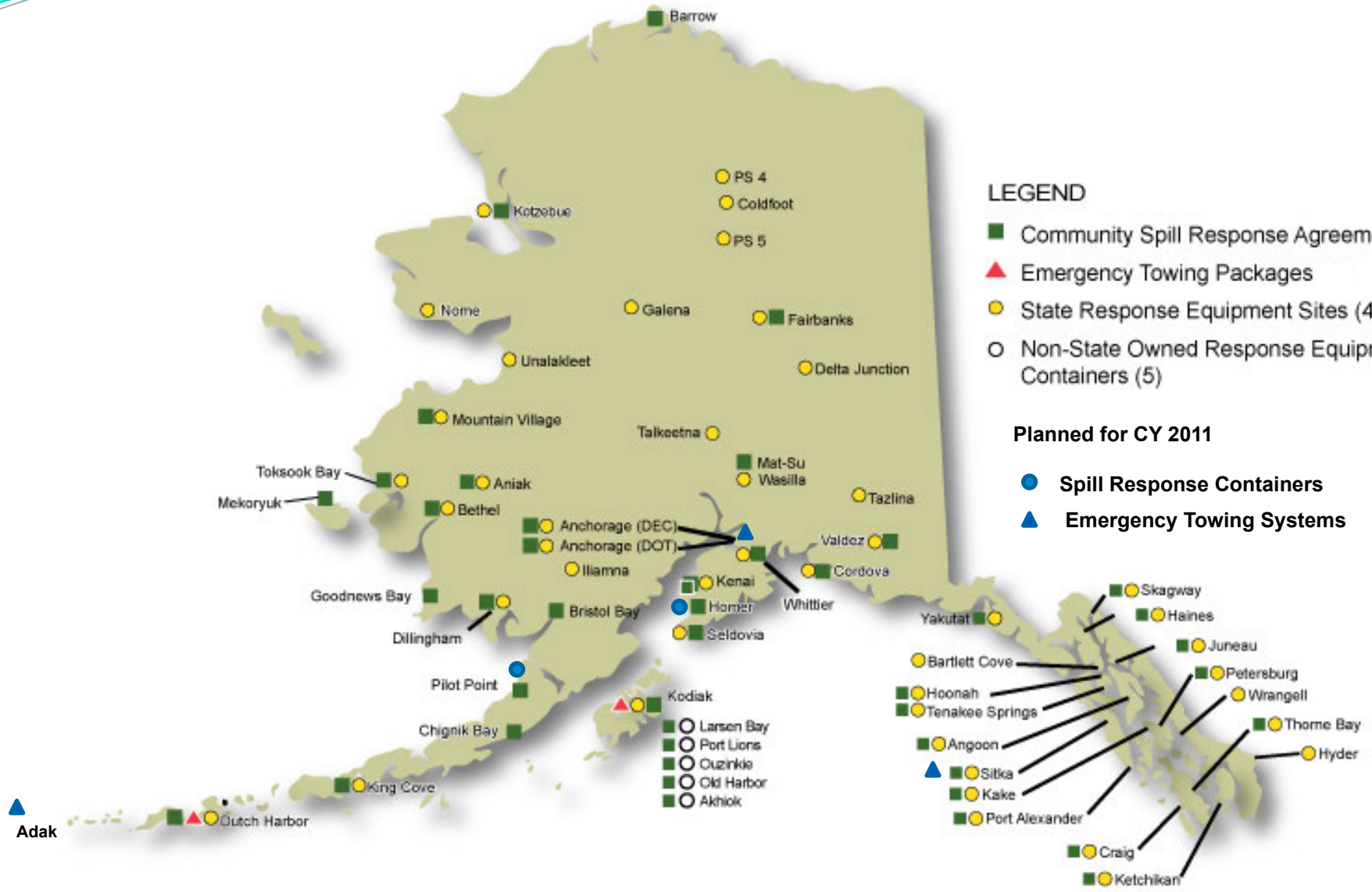
- **Sensitive Area Prioritization and Protection**
- **Pre-Identified Operational Tactics**

Local Response Agreements

- **Formal Agreement between DEC and Local Community; nearly 50 agreements in place, several pending**
- **Activated by DEC's State On-Scene Coordinator for spills in local area**
- **Local Community Reimbursed by DEC for expenses incurred**
- **DEC-owned Spill Response Container located in Community**



State of Alaska Local Response Assets



CSRA Map_V13.ai 1/27/2010

Local Community Response Enhancements

- **Spill Response Containers**
- **DEC provides Training to Local Responders**
- **DEC provides maintenance and replacement costs for equipment and supplies**

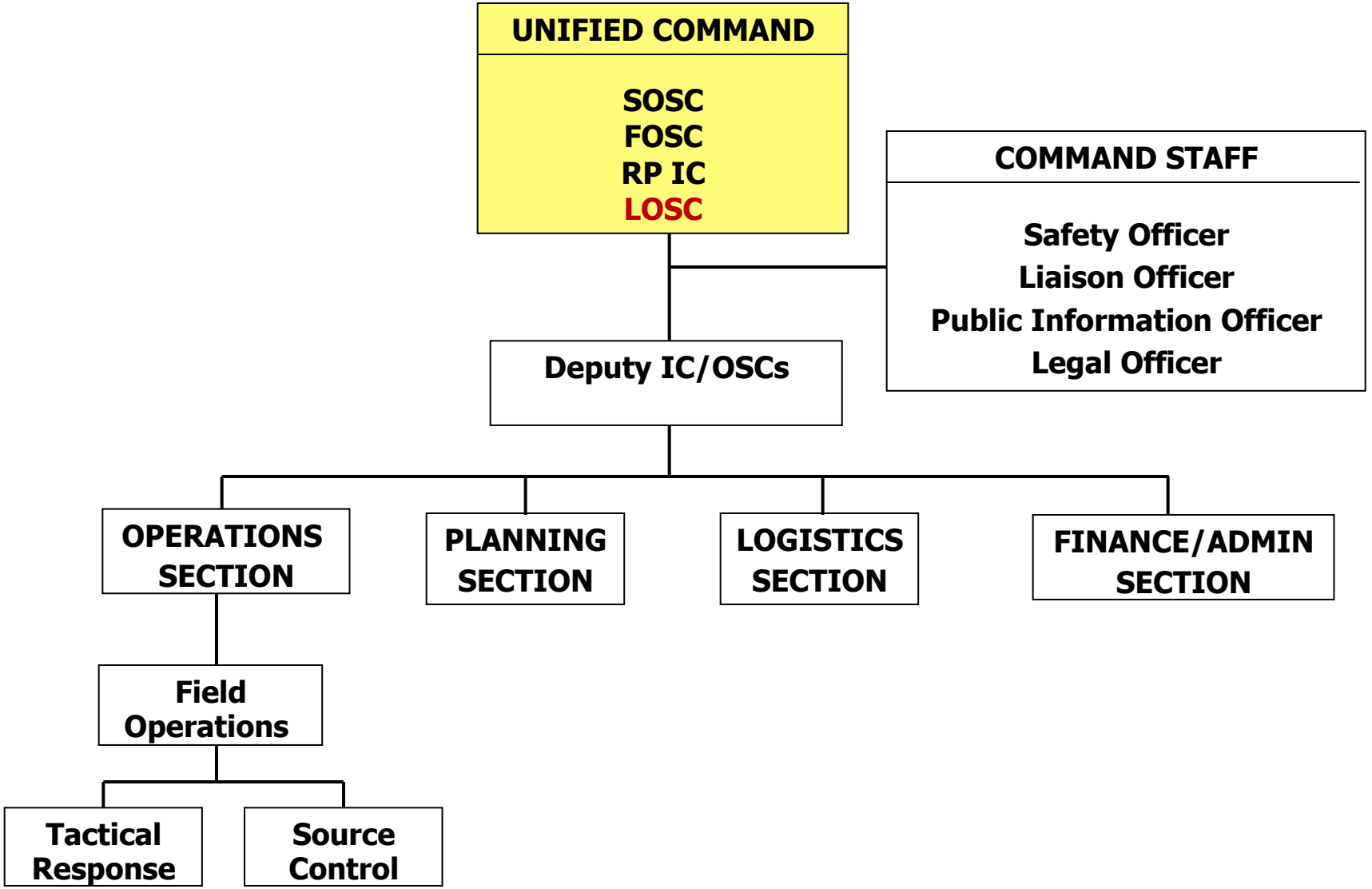
Key Roles for Local Responders

- **Local On-Scene Coordinator**
- **Regional Stakeholder Committee**
- **Local Knowledge**
- **Augment the Response with Trained Workers**

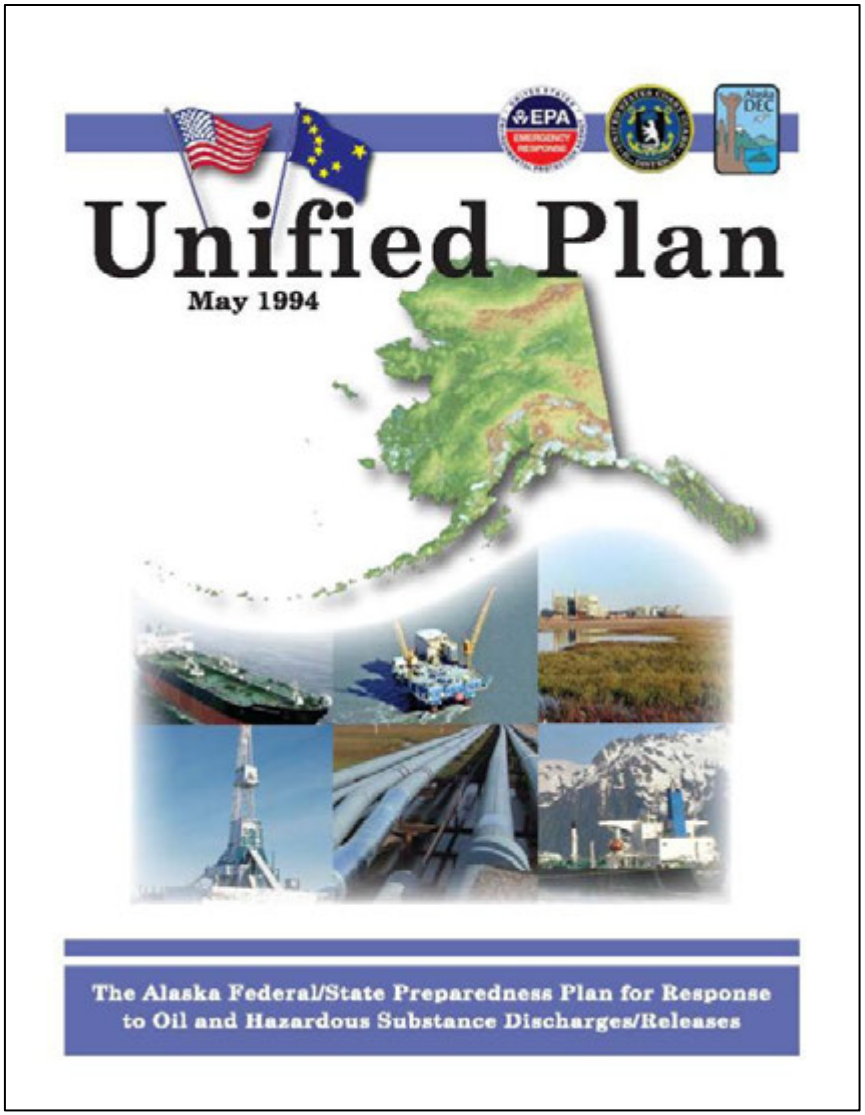
North Slope Borough Village Response Team – GC-2 Spill (March 2006)

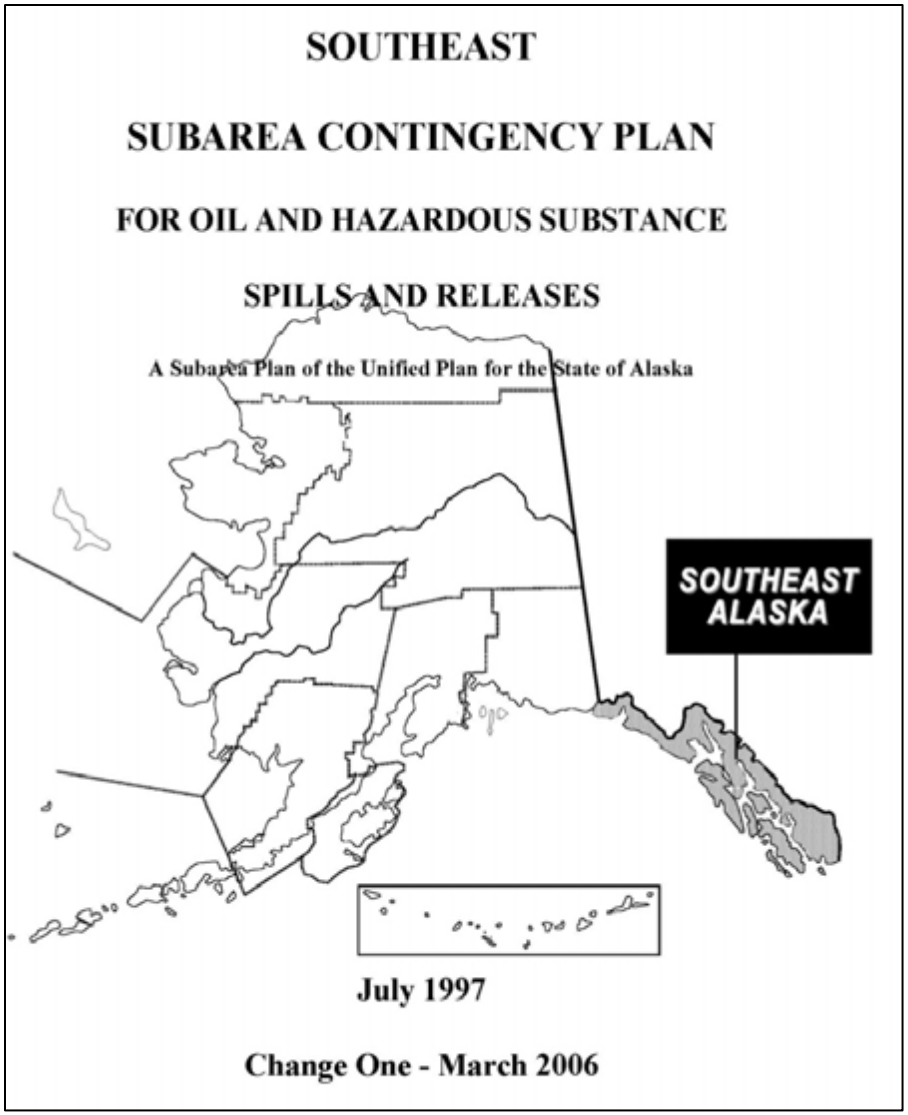
Local-Hire Worker – Selendang Ayu Spill (April 2005)

Typical Response Organization

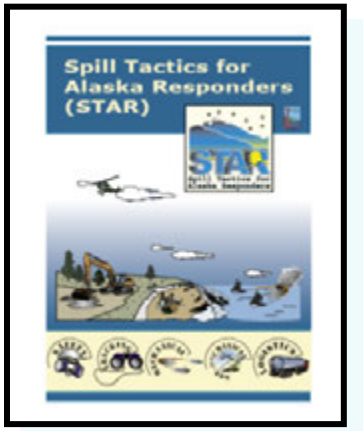


Key Federal/State Plans





Supporting Documents

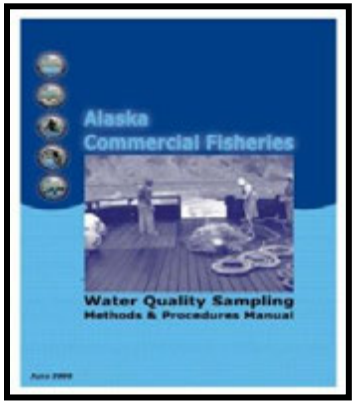


Response Tactics

Alaska Incident Management System Guide

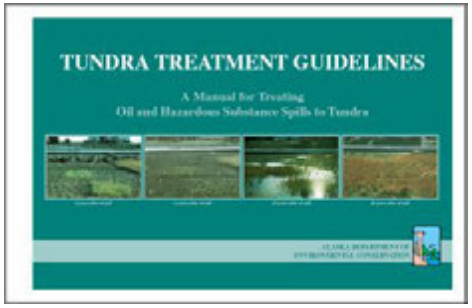
(AIMS)

For Oil and Hazardous Substance Response



Fisheries/
Water Sampling

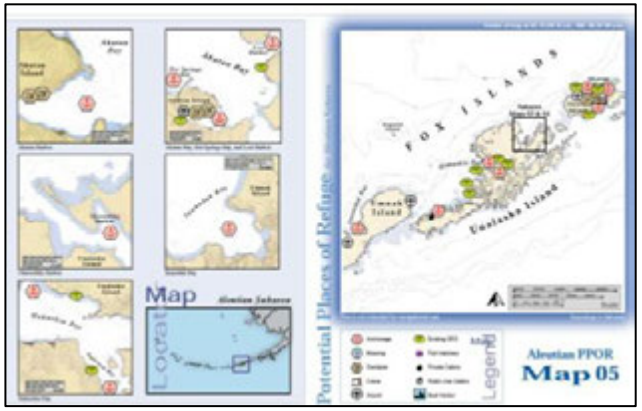
Geographic Response Strategies



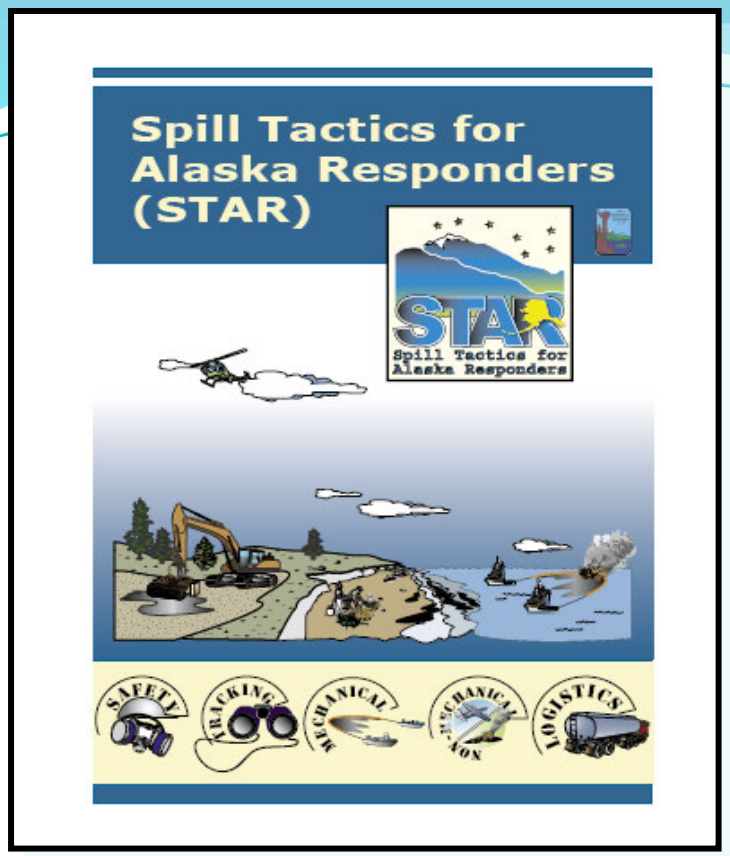
Tundra Treatment Manual

Permits Tool

GRIN Tool



Potential Places of Refuge



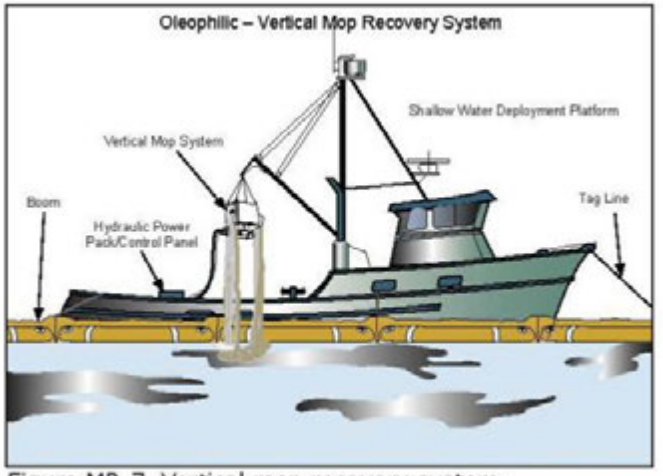


Figure MR-7. Vertical mop recovery system.

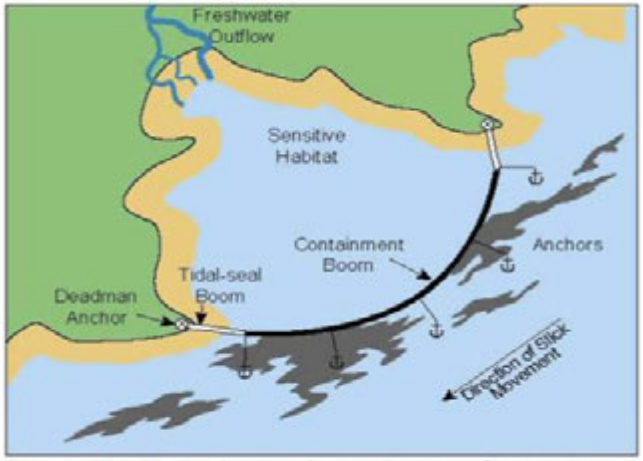


Figure EX-3. Exclusion booming configuration.

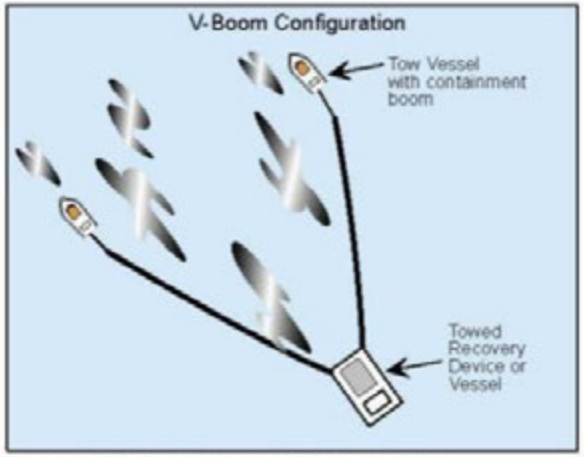


Figure FO-4. V-boom Configuration.

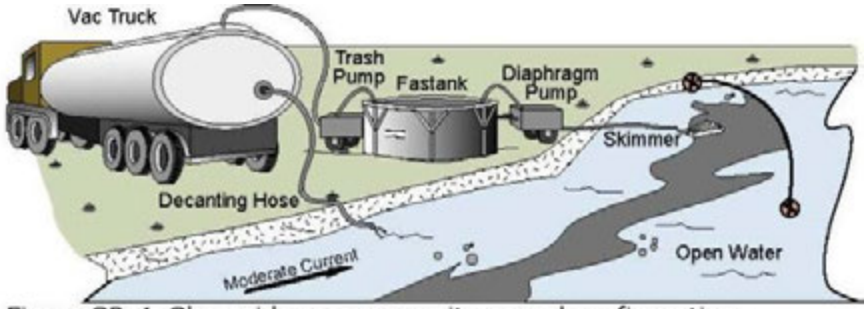
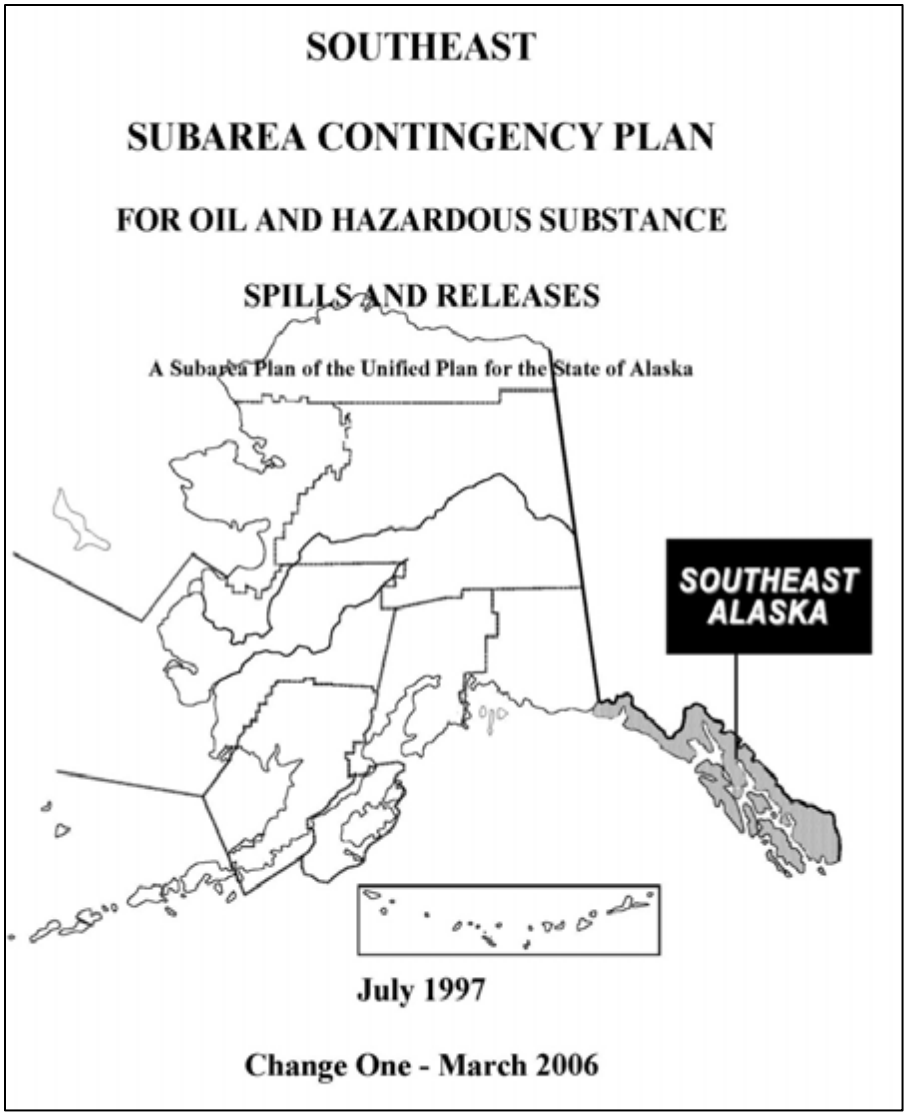


Figure SR-4. Shoreside recovery unit general configuration.

Southeast Subarea Plan Schedule

- **Agency and Tribal Government Review – Summer 2012**
- **Public Review – Fall/Winter 2012**
- **June 2013: Additional GRS Completed**
- **Plan Finalized – Winter/ Spring 2013**



Questions/Discussion

http://dec.alaska.gov/spar/perp/index.htm


Whitehorse
ALASKA HIGHWAY
HAINES HIGHWAY
KLONDIKE GOLD RUSH NATIONAL HISTORICAL PARK
BRITISH COLUMBIA
JUNEAU
CHICAGOF ISLAND
TONGASS
NATIONAL FOREST
ETOLIN ISLAND
REVILLAGIGEDO ISLAND
ALEXANDER ARCHIPELAGO
COAST MOUNTAINS

Geographic Response Strategies in Alaska

Oil Spill Response

#1 -Stop and contain the oil at the source.

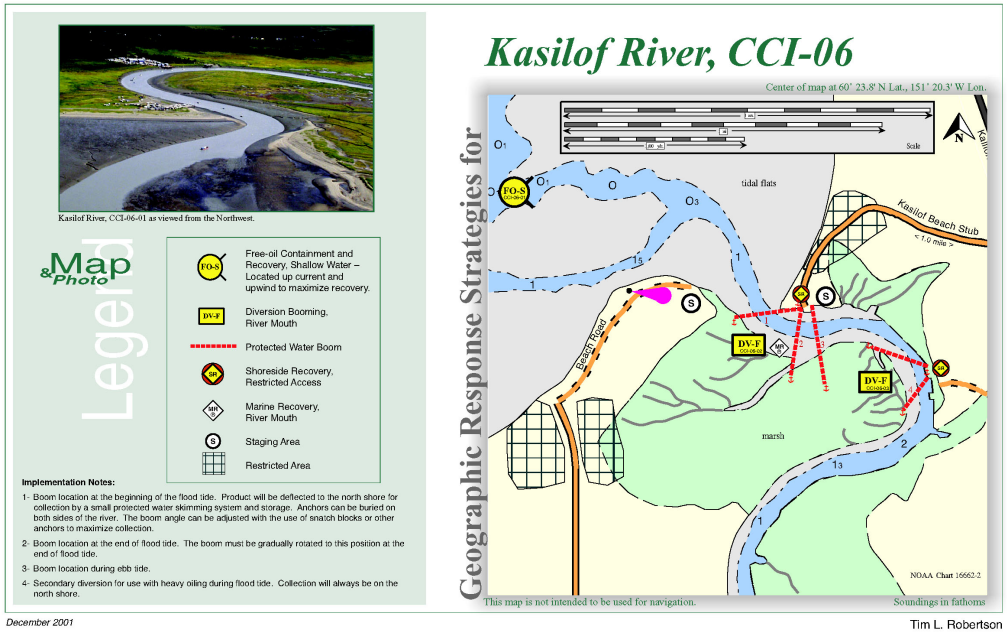
Oil Spill Response

#2 -Collect the oil on the water.

Oil Spill Response

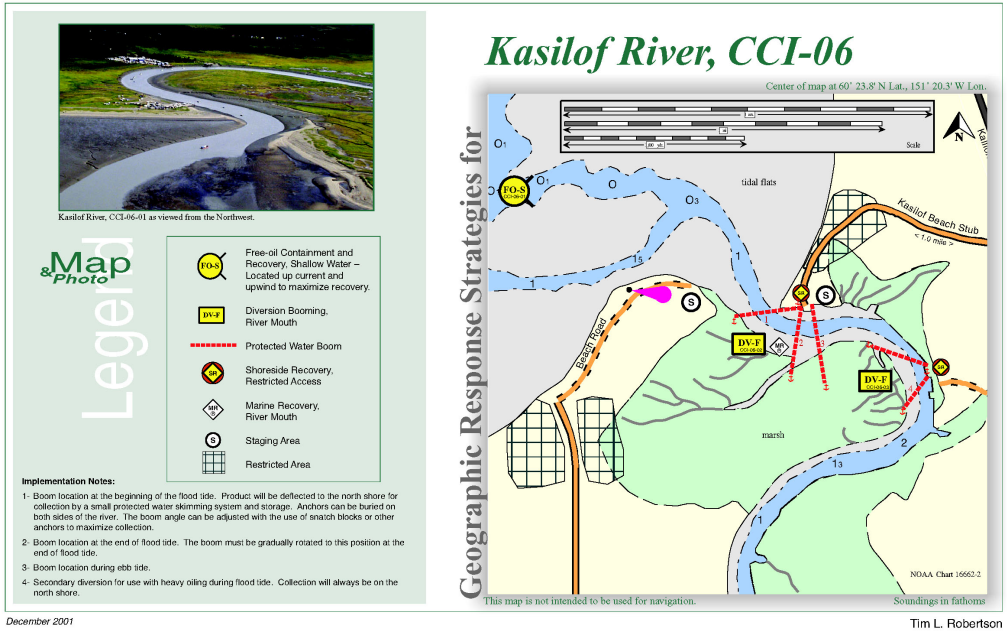
#3 -Protect sensitive areas from impacts.

Geographic Response Strategies



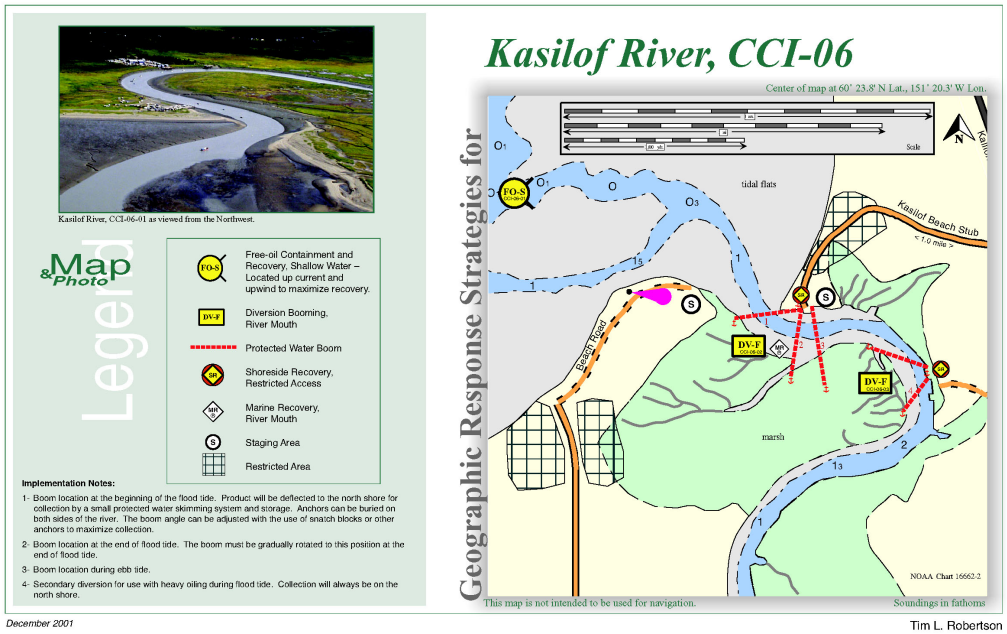
What is a GRS ?

- GRS are response tools that maybe utilized by an Incident Command or Responsible Party in the event of an oil spill.



What is a GRS ?

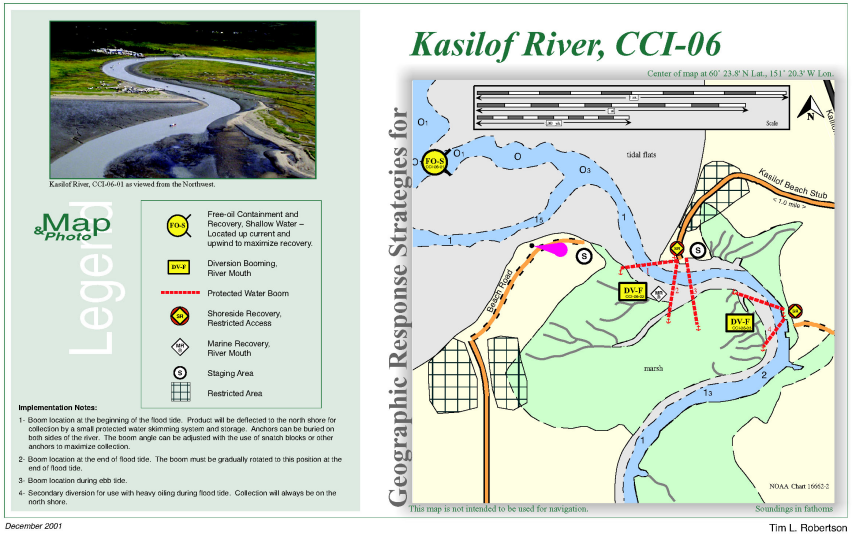
- Shore-side and near shore response strategies for the protection of pre-selected sensitive areas.



What is a GRS ?

- A consensus product a result of a planning effort involving trustee agencies, response agencies, spill responders and the public.

  The workgroup.



What is a GRS ?

- Public document that is Part G of the State/Federal Subarea Plan.

Work Group Membership

Oversight Agencies

USCG EPA

ADEC

Natural Resource Agencies

ADFG ADNR

DOI FWS NPS

NOAA NMFS USFS

MMS

Response Organizations

Alaska Chadux

CISPRI

SERVS

SEAPRO

C-plan Holders

Local Governments

Tribal Org/Gov

Guiding Principles

Primary

- **Responder-oriented strategies and techniques to protect sensitive areas.**
- **Strategies should be flexible and modifiable to fit the prevailing conditions.**
- **No unnecessary duplication of information in other plans.**

Guiding Principles

Primary

- **Identifies resources at risk and set priorities for their protection.**
- **The documents specify required response resource, logistical information, and field instructions for deployment.**
- **Easy to use, test and update.**
- **Content more important than form.**

Guiding Principles

Secondary

- **Increase public awareness of response plans prior to a spill**
- **Low maintenance cost and time**
- **Low unit cost**
- **Incident Command System friendly**

Document Organization

Part 1 Introduction

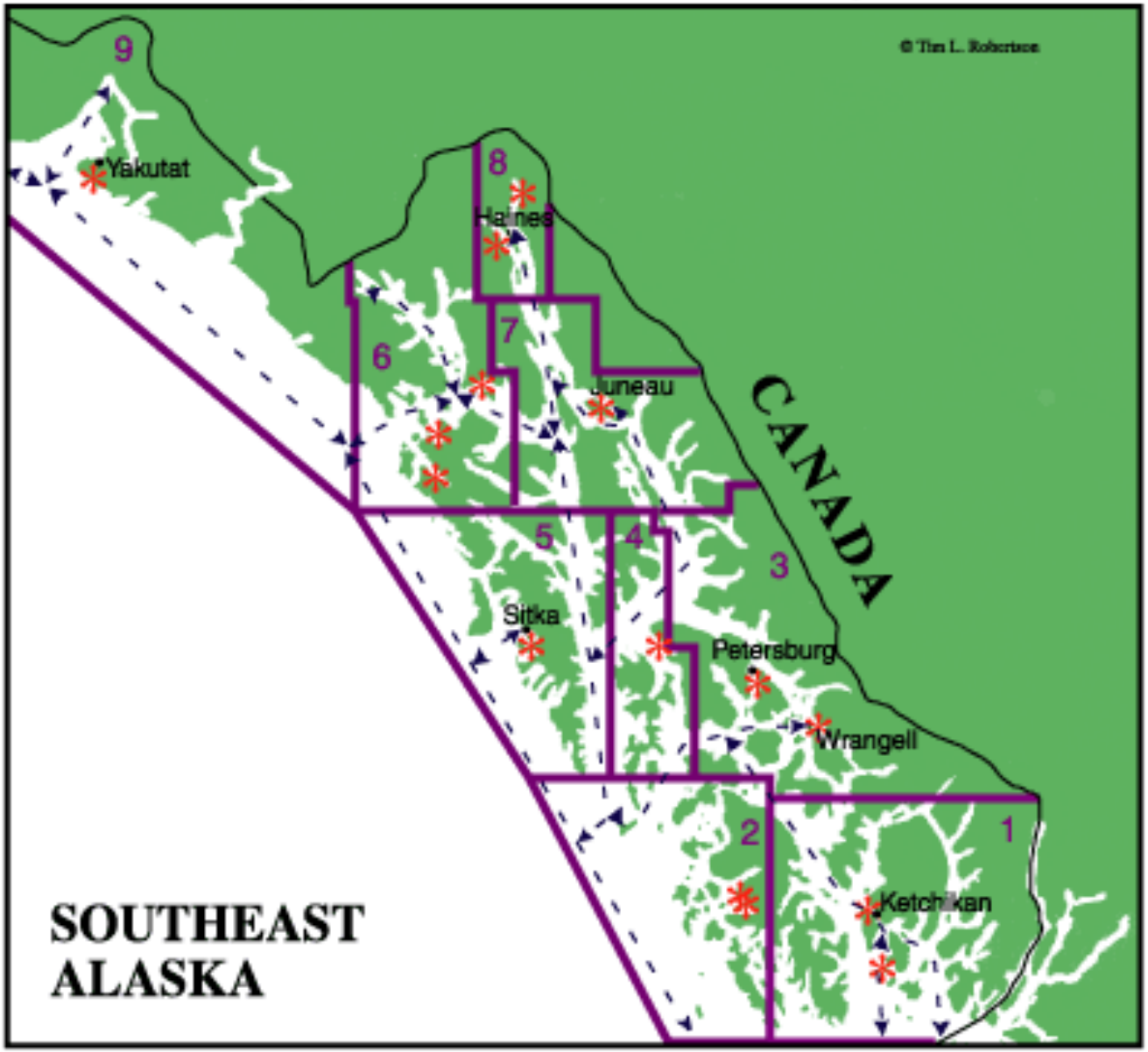
Part 2 Geographic Response Strategies

Part 3 References

Part 1 Introduction

- Purpose and Scope
- How to Use This Document
- STAR Manual- “Spill Tactics for Alaska Responders”
- Who to Contact for Input
- How the Document Was Developed
- Zone Map
- Site Selection Matrix

Response Zone Map



Part 2

Geographic Response Strategies

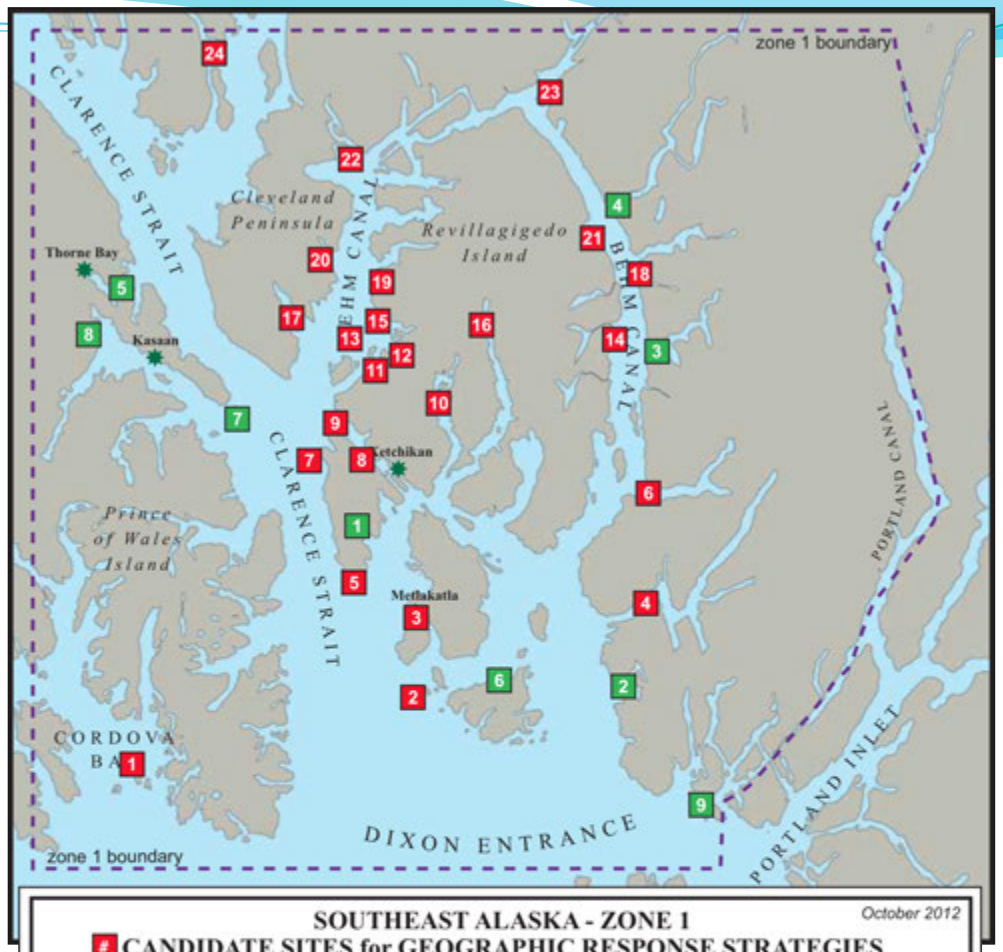
Index Map to Sites

Legend

Geographic Response Strategies

- Site Map, Picture, Notes
- Table - Location, Description, Implementation, Response Resources, Staging, Access, Resources Protected, Special Considerations

Index Map



SOUTHEAST ALASKA - ZONE 1 *October 2012*

 # CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

1 – Barrier Island-Cordova Bay
2 – Percy Islands
3 – Tamgas Harbor
4 – Boca de Quadra
5 – Dall Bay
6 – Smeaton Bay
7 – Vallenar Bay
8 – Refuge Cove
9 – Totem Blight
10 – George Inlet-Salt Chuck
11 – Settlers Cove
12 – Moser Bay
13 – Roosevelt Lagoon-Naha Bay
14 – Manzanita Bay
15 – Naha Bay
16 – Carroll Creek
17 – Helm Bay
18 – WWalker Cove
19 – Traitors Cove
20 – Port Stewart
21 – Portage Cove
22 – Yes Bay
23 – Burroughs Bay
24 – Thom's Place

 # Established GEOGRAPHIC RESPONSE STRATEGIES

SE01-01 – Bostwick Estuary
SE01-02 – Foggy Bay
SE01-03 – Rudyerd Bay
SE01-04 – Chickamin River Estuary
SE01-05 – Thorne Bay
SE01-06 – Dog Island
SE01-07 –Grindall Island
SE01-08 – Karta Bay
SE01-09 – Lincoln Channel

Geographic Response Strategy

Map Page

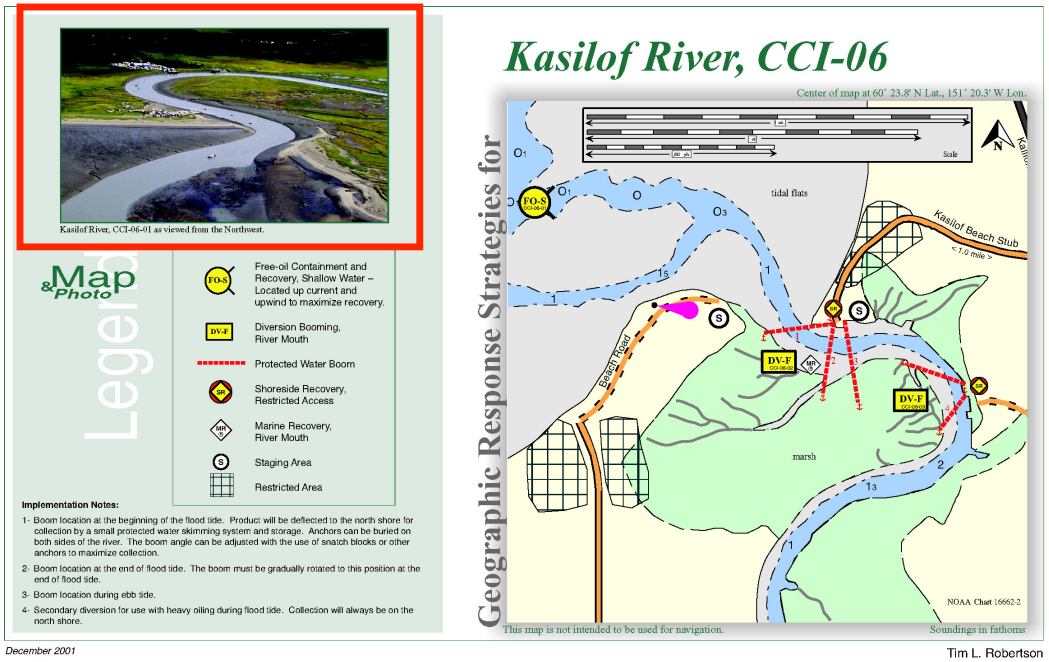


Table Page

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Map Page - Photo

Geographic Response Strategy

Map Page

Kasilof River, CCI-06-01 as viewed from the Northwest.

Legend & Map Photo

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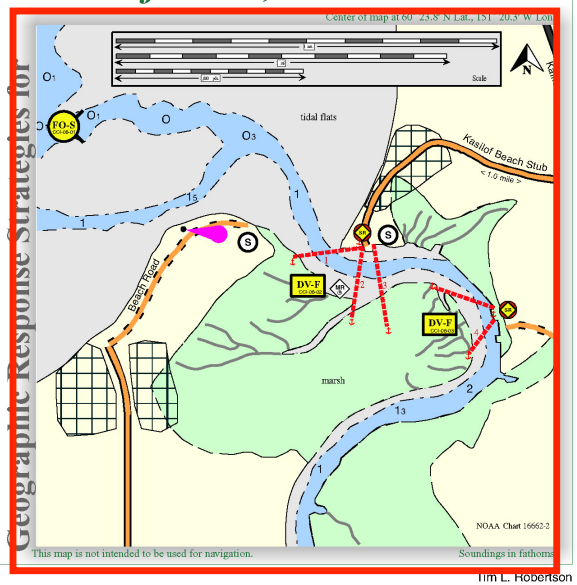
December 2001



Tim L. Robertson

Cook Inlet Geographic Response Strategies — December 2001

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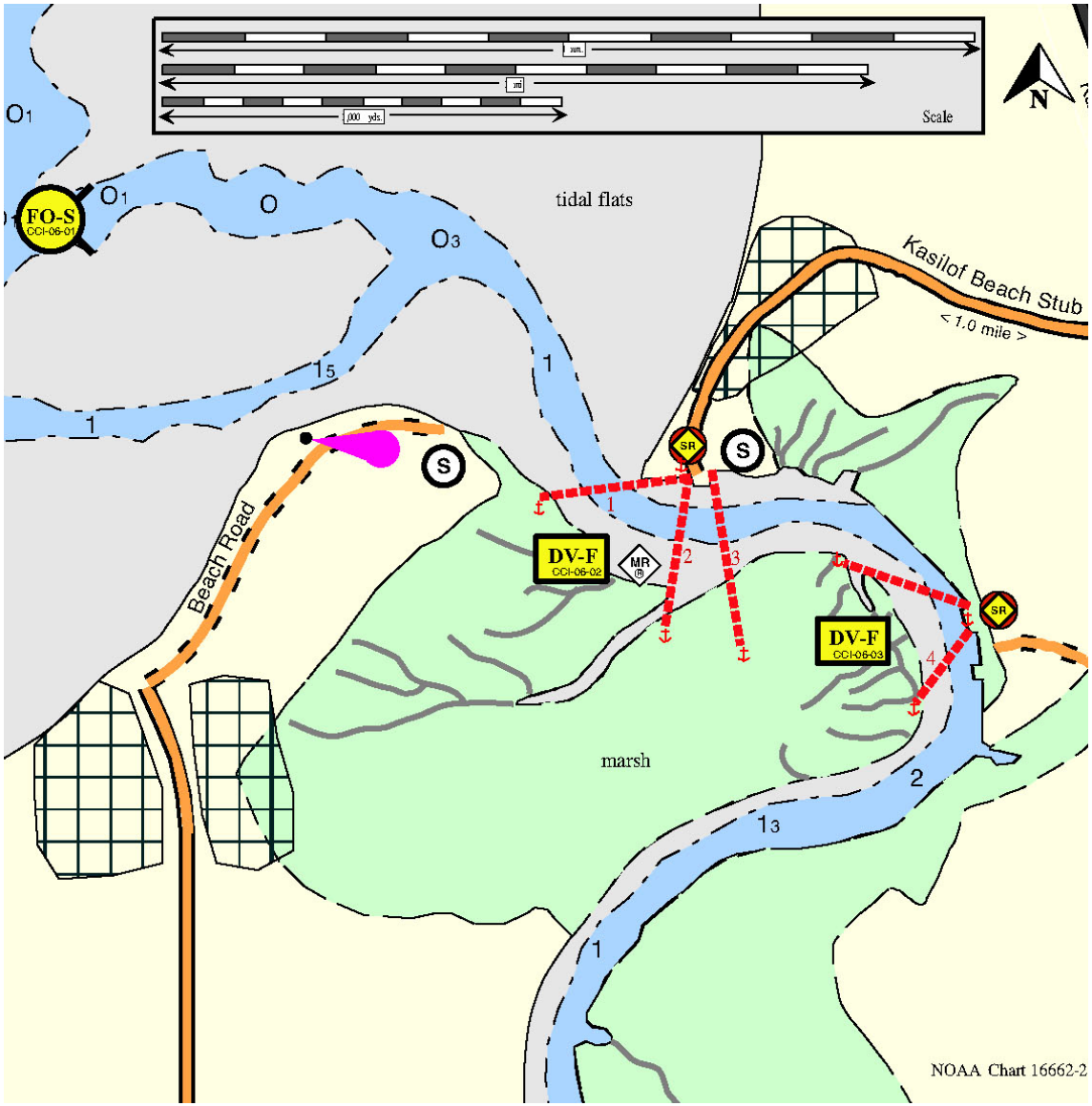
CCI-6

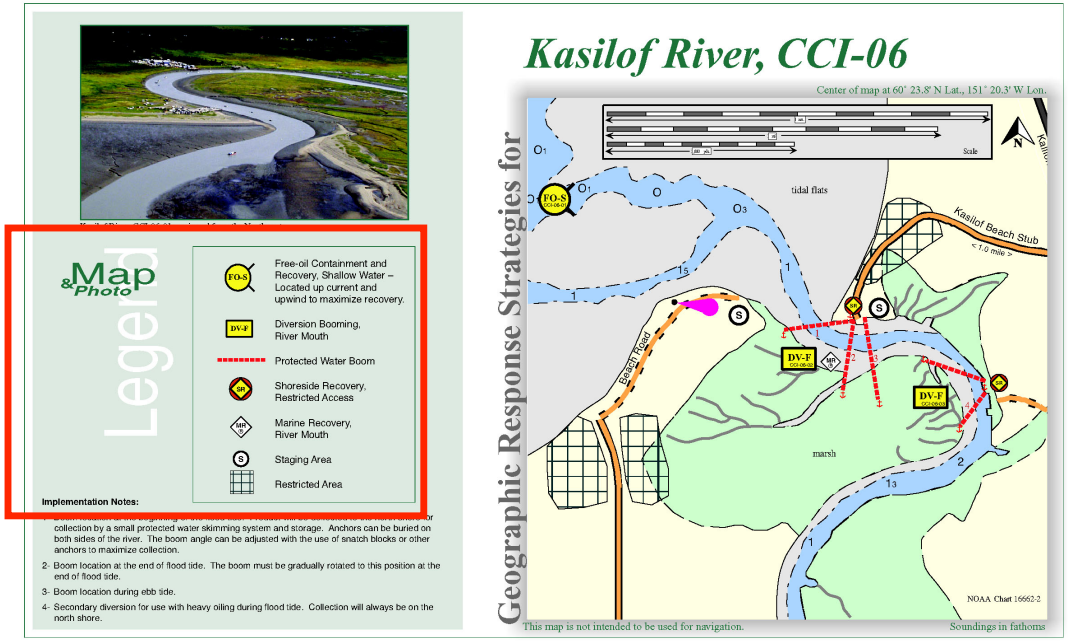
Table Page

Map Page - Tactics Map



Geographic Response Strategy

Map Page



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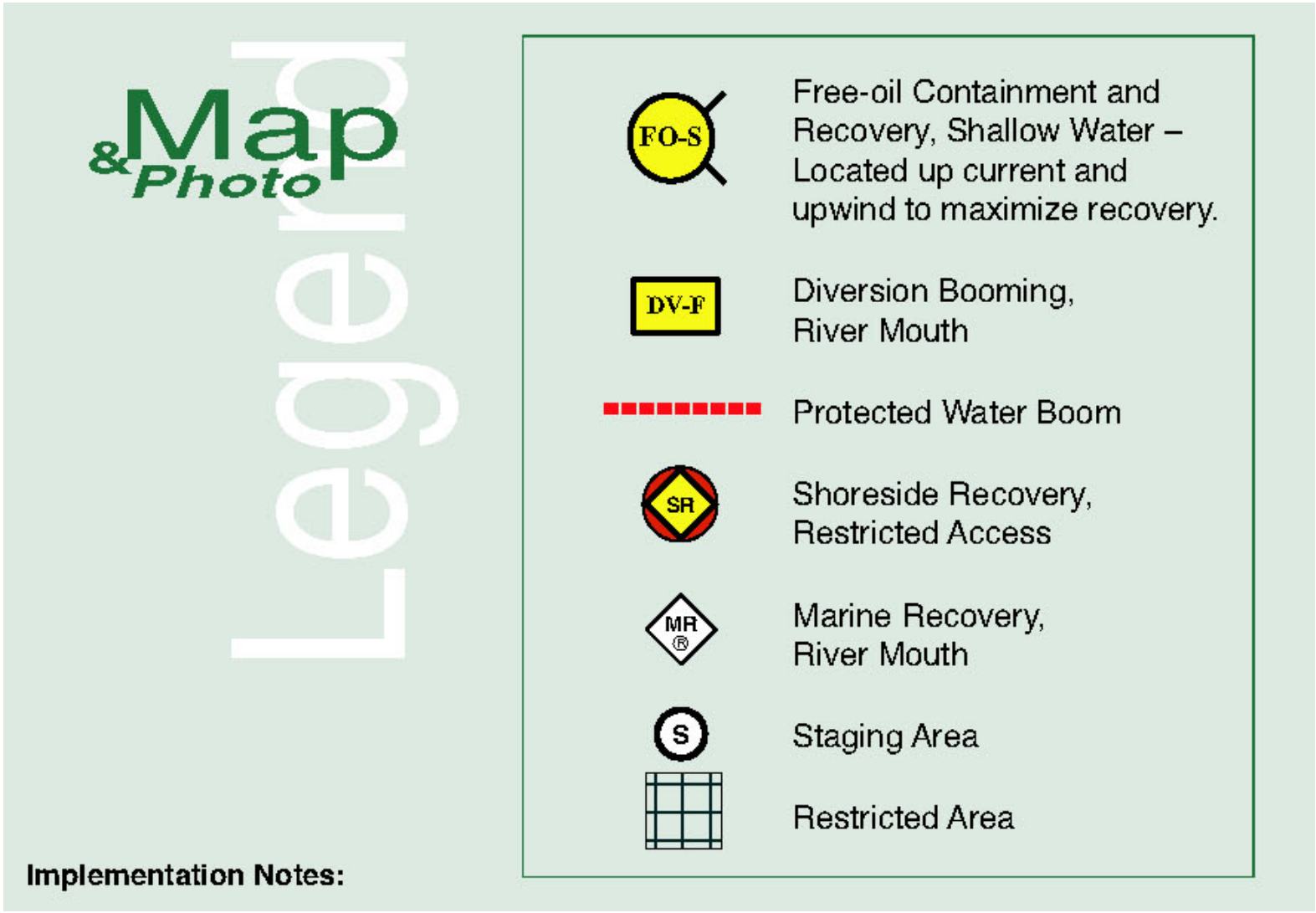

Geographic Response Strategy

Map Page

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Map & Photo

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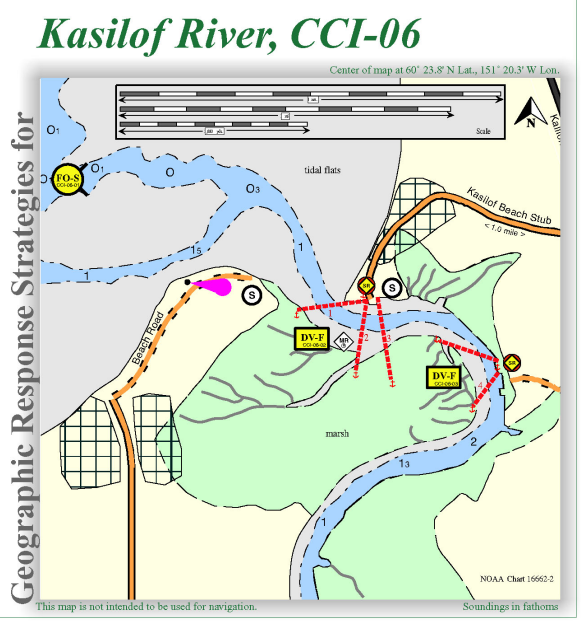

December 2001

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CCI-6

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Geographic Response Strategy

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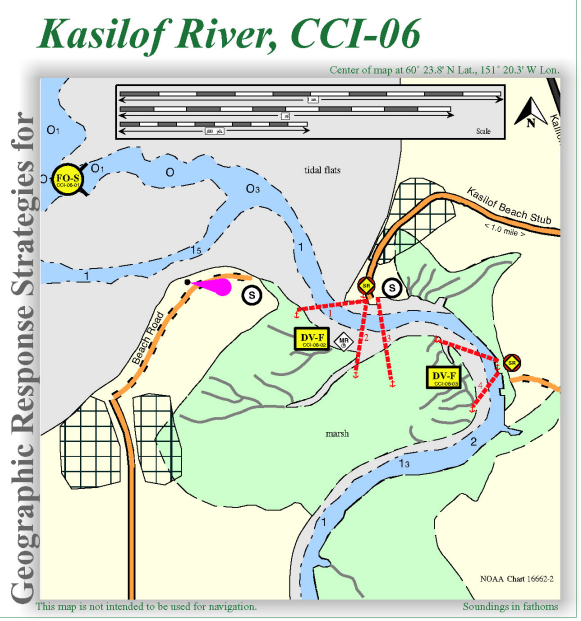

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CCI-06-02	**Kasilof River** Lat. 60° 23.13 N Lon. 151° 17.87 W 2.5 nm. north of Cape Kasilof on east side of Cook Inlet River Channel • entrance marked by lighted buoy (May - November). • not navigable at low tide. • strong currents. • narrow and winding. • boats ≤ 6' can navigate in river from entrance to 6 mi. upstream. Docks • located North side of river. • Cook Inlet Processing, 78' dock face, launch ramp and detached float.	* Divert spilled product to designated collection sites *Recover spilled product at designated collection sites. **Seasonal Restriction** River iced-in/not navigable from approximately November to April.	Place 3,000 ft. of diversion boom and collect product with an on-shore and/or marine collection unit.	**Equipment** 5 ea. 200 ft. river boom units 2 ea. protected water skimmer 600 ft. 2" discharge hose 2 ea. on-shore storage unit 12 ea. 40 lb. anchor systems 1 ea. marine storage unit 2000 ft. line **Support** 3 ea. vessel class #5/6 1 ea. truck 1 ea. truck with trailer 1 ea. shelter. 2 ea. ATV trailers 2 ea. ATVs 25 ea. fence posts 1 or 2 light plants **Personnel/Shift** 12 ea. deploy & set-up 8 ea. tend & maintain	**North shore:** • Services - crane, boat launch, electric power, heavy equipment access • Security - none. • Support - shelter. **South shore:** • Private land off Coho Loop • Service - none. • Security - none. • Support - shelter	**FOSC Historic Properties Specialist should INSPECT site prior to operations.** FOSC Historic Properties Title 36 permit may be required to work inside river. Contact Environmental Unit of the Unified Command for permit. **North shore:** Kalifornski Beach Road to Kasilof Beach Road, ends at beach near processor. **South shore:** Coho Loop road to end of dirt road, beach access via ATV or off road equipment. **Seasonal Restriction** Not accessible during winter approximately November - April.	• Tidal marshes (all year) • Salmon migration and spawning (May - October) • Intertidal salmon spawning (July - September) • Waterfowl and shore bird concentrations (May - September) • Fishing (July - September) • Heavy recreational use (June - September)	• Very difficult and unsafe to protect exposed tidal flats outside river mouth. • Working on banks of the river should be no problem. Take care not to work or walk on oiled shoreline, to avoid driving oil into the soils. • Access above intertidal area will have to be resolved with landowners before setting anchors or staging areas. **Seasonal** Vessel mooring buoys available during fishing season.
CCI-06-03	**Kasilof River** - Secondary Lat. 60° 22.97 N Lon. 151° 17.27 W Same as CCI-06-02.	* Duplicate primary tactics of diversion & collection further upstream, if required.	Place 1,000 ft. of diversion boom and collect oil with an on-shore unit.	**Equipment** 5 ea. 200 ft. river boom units 1 ea. protected water skimmer 600 ft. 2" discharge hose 2 ea. on-shore storage unit 10 ea. 40 lb. anchor systems 1000 ft. line **Support** 1 ea. vessel class #5/6 1 ea. truck 1 ea. truck with trailer 1 ea. shelter. 2 ea. ATV trailers 2 ea. ATVs 25 ea. fence posts 1 or 2 light plants **Personnel/Shift** 10 ea. deploy & set-up 6 ea. tend & maintain	**North shore:** • Services - crane, boat launch, electric power • Security - none. • Support - shelter. **South shore:** • Private land off Coho Loop • Service - none. • Security - none. • Support - shelter	Permits and inspection required (see CCI 06-02). **North shore:** Kalifornski Beach Road to Trans-Aqua sign, (1/4 mi. past Kasilof beach road). **South shore:** Coho Loop road to end of dirt road, beach access via ATV or off road equipment.	Same as CCI-06-02	Same as CCI-06-02

CCI-6

Table Page

ntation	Response Resources	Staging Area	Site
shore strike d and up e river aerial to locate .	Multiple nearshore free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Kasilof Harbor or Kenai Harbor	Via marine See NOA 16661-1, 1 16662-2.
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Geographic Response Strategy

Map Page

Kasilof River, CCI-06-01 as viewed from the Northwest.

Legend & Map Photo

- FO-S — Free-oil Containment and Recovery, Shallow Water – Located up current and upwind to maximize recovery.
- DV-F — Diversion Booming, River Mouth
- Protected Water Boom
- SR — Shoreside Recovery, Restricted Access
- MR — Marine Recovery, River Mouth
- S — Staging Area
- Restricted Area

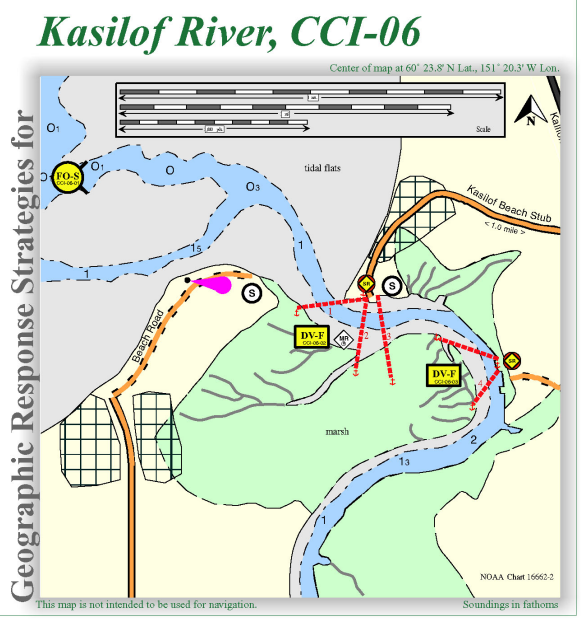
Implementation Notes:

1- Boom location at the beginning of the flood tide. Product will be deflected to the north shore for collection by a small protected water skimming system and storage. Anchors can be buried on both sides of the river. The boom angle can be adjusted with the use of snatch blocks or other anchors to maximize collection.

2- Boom location at the end of flood tide. The boom must be gradually rotated to this position at the end of flood tide.

3- Boom location during ebb tide.

4- Secondary diversion for use with heavy oiling during flood tide. Collection will always be on the north shore.



December 2001

Tim L. Robertson

Cook Inlet Geographic Response Strategies — December 2001

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
CCI-06-01	**Kasilof River** Nearshore waters in the general area of: Lat. 60° 23.8 N Lon. 151° 20.3 W	* Maximize on-water recovery in the offshore & nearshore environment / outside the mudflats.	Deploy nearshore strike teams upwind and up current of the river mouth. Use aerial surveillance to locate incoming oil.	Multiple nearshore free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Kasilof Harbor & Kenai Harbor	Via marine waters. See NOAA Charts 16661-1, 16662-1 or 16662-2.	Same as CCI-06-02.	Strong tidal currents, shoal waters and rocks. Vessel master should have local knowledge.
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CCI-6

Table Page

rea	Site Access	Resources Protected (months)	Special Considerations
Kenai	Via marine waters. See NOAA Charts 16661-1, 16662-1 or 16662-2.	Same as CCI-06-02.	Strong tidal currents, shoal waters and rocks. Vessel master should have local knowledge.
oat launch, eavy s oho Loop	**FOSC Historic Properties Specialist should INSPECT site prior to operations.** FOSC Historic Properties Title 16 permit may be required to work inside river. Contact Environmental Unit of the Unified Command for permit. **North shore:** Kalifornski Beach Road to Kasilof Beach Road,	• Tidal marshes (all year) • Salmon migration and spawning (May - October) • Intertidal salmon spawning (July - September) • Waterfowl and shore bird concentrations (May - September) • Fishing (July - September)	• Very difficult and unsafe to protect exposed tidal flats outside river mouth. • Working on banks of the river should be no problem. Take care not to work or walk on oiled shoreline, to avoid driving oil into the soils. • Access above intertidal area will have to be resolved with landowners before setting anchors or staging areas.

Section 3 References

Sensitive Areas

Land Ownership

Site Selection Process:
Criteria for Site Selection

Environmental Sensitivity

Criteria for Site Selection

Risk of Oil Spill Impact

Criteria for Site Selection

Ability to Protect the Site

Identify Candidates Sites:

Develop Site Selection Matrix (SSM)

Columns - Priority Criteria From Area Plan

Rows – Potential Sites

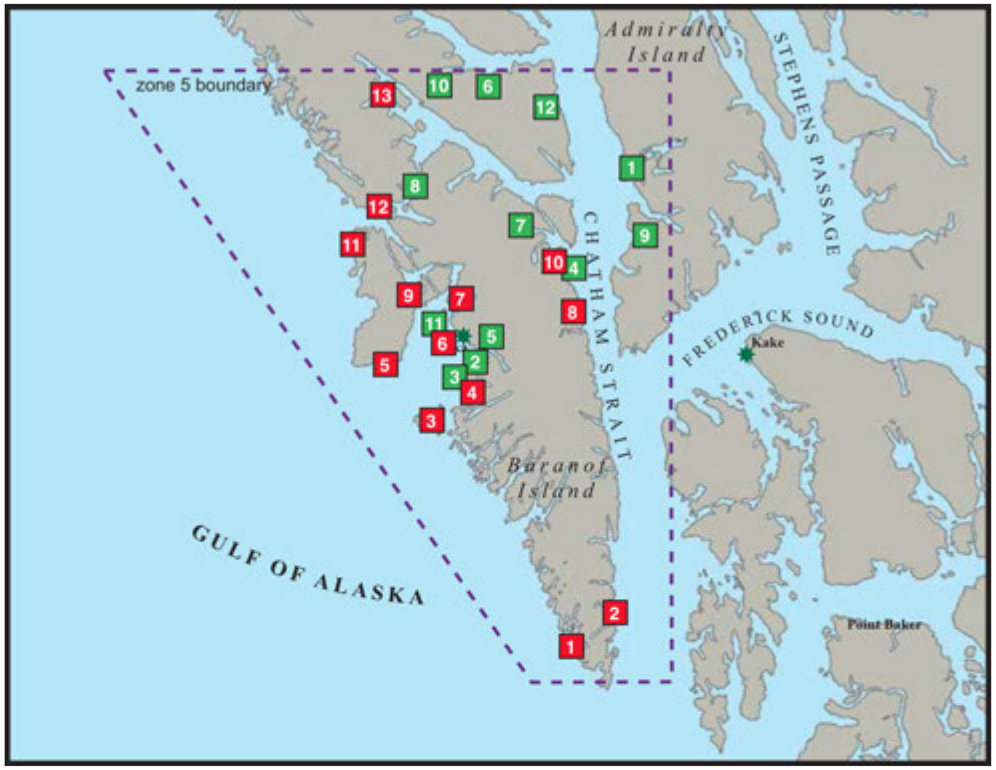
Southeast Alaska GRS – ZONE FIVE
Site Selection Matrix

Zone	Selection Number	Name	Lat.	Lon.	Priority	Marine Mammals	Fish	Birds	Coastal Habitat	Cultural Resources	Subsistence	Recreational Use	Commercial Fishing	Land Management	Commercial	Resource Concentration	Natural Collection Points
5	1	Redfish Bay	56º18.92'N	134º52.16'W			S									1	
5	2	Little Port Walter	56º23.48'N	134º37.44'W													
5	3	Biorka Island	56º51.79'N	135º31.06'W													
5	4	Redoubt Bay	56º55.30'N	135º21.56'W			S									1	
5	5	Saint Lazeria Island	56º59.16'N	135º42.60'W	1			S	I			H				3	
5	6	Halibut Pt. SRS	57º05.93'N	135º24.45'W								H				1	
5	7	Old Sitka SHP	57º07.95'N	135º22.72'W								H				1	
5	8	Takatz Bay	57º09.07'N	134º49.86'W			S									1	
5	9	Magoun Island SMP	57º09.76'N	135º34.60'W													
5	10	Kasnyku Bay	57º12.94'N	134º51.26'W													
5	11	Sea Lion Cove	57º18.01'N	135º50.44'W													
5	12	Salisbury Sound	57º22.01'N	135º47.44'W													
5	13	Patterson Bay (DeerLake)	57º39.94'N	135º44.96'W			S									1	
5	SE05-01	Mitchell Bay-Angoon	57º30.16'N	134º34.33'W	1												
5	SE05-02	Sandy Cove	56º58.82'N	135º18.60'W	1												
5	SE05-03	Pirate Cove	56º59.04'N	135º22.58'W	1												
5	SE05-04	Cosmo Cove	57º14.43'N	134º51.80'W	1												
5	SE05-05	Indian River	57º02.76'N	135º18.71'W	1												
5	SE05-06	Kadashan Bay	57º42.91'N	135º13.75'W	1												
5	SE05-07	Kelp Bay	57º20.37'N	135º00.55'W	1												
5	SE05-08	Baby Bear Marine Park	57º25.48'N	135º34.10'W	1												
5	SE05-09	Chiak Bay	57º18.88'N	134º31.20'W	1												
5	SE05-10	Crab Bay	57º45.01'N	135º21.38'W	1												
5	SE05-11	Middle Island	57º05.37'N	135º26.95'W	1												
5	SE05-12	Basket Bay	57º39.88'N	134º54.89'W	1												

Key to Site Selection Matrix

Marine Mammals	Fish	Birds	Coastal Habitat	Cultural Resources	Subsistence Use	Recreational Use	Commercial Fishing	Land Management
S = Steller Sea Lion rookeries and haulouts	E = Eulachon spawning concentration	C = Waterfowl & shorebird migratory, molting, and winter concentration	T = Sheltered tidal flat	I = FOSC Historic Properties Specialist should Inspect site prior to operations	I = High use marine invertebrate area		H = Salmon hatchery or ocean pen	P = State park
O = Sea otter concentration >100 otters	R = Juvenile fish rearing in kelp and reefs	M = Marbled murrelet nearshore feeding concentration	R = Sheltered rocky shore	M = FOSC Historic Properties Specialist should Monitor onsite operations			P = Shorebased fish processor	N = National park and preserve
W = Humpback whale summer, fall, winter concentration	S = More than 10,000 salmon spawners	K = Kittlitz murrelet (proposed endangered species) habitat	K = Kelp or eelgrass beds				N = Set-net fishery	L = National landmark
			I = High area of intertidal diversity					R = National wildlife refuge
								W = Wild & scenic river
Source								
Primary sources: SE SCP, NOAA ESI maps, NMFS, ADFG, FWS, NPS data	Primary sources: ADFG, FWS, NMFS data	Primary sources: SE SCP, NOAA ESI maps, FWS Seabird Colony Catalog, ADFG, FWS data	Primary sources: NOAA ESI maps, FWS, ADFG data	Primary sources: ADNR, USFS	Primary sources: ADFG, USFS data	Primary sources: ADNR, USFS, NPS data	Primary sources: ADFG data	Primary sources: ADNR, NPS, ADFG, FWS, USFS data

Index Map of Candidate Sites



October 2012

SOUTHEAST ALASKA - ZONE 5

 # CANDIDATE SITES for GEOGRAPHIC RESPONSE STRATEGIES

1 – Redfish Bay
2 – Little Port Walter
3 – Biorka Island
4 – Redoubt Bay
5 – Saint Lazeria Island
6 – Halibut Pt. SRS
7 – Old Sitka SHP
8 – Takatz Bay
9 – Magoun Island
10 – Kasnyku Bay
11 – Sea Lion Cove
12 – Salisbury Sound
13 – Patterson Bay

 # Established GEOGRAPHIC RESPONSE STRATEGIES

SE05-01 – Angoon/Mitchell Bay
SE05-02 – Sandy Cove
SE05-03 – Pirate Cove
SE05-04 – Cosmos Cove
SE05-05 – Indian River
SE05-06 – Kadashan Bay
SE05-07 – Kelp Bay Middle Arm
SE05-08 – Baby Bear
SE05-09 – Chaik Bay
SE05-10 – Crab Bay
SE05-11 – Middle Island (SW Cove)
SE05-12 – Basket Bay

Site Selection Process

Initial Selection by Workgroup

Public Input Process

- Resource Maps, SSM posted to the website and opened to the public and workgroup for input/comments.
- Outreach to organizations and resource agencies to confirm resource location.

Finalized Site Selection after Public Input

Tactics Group

Gather Additional Information on Sites

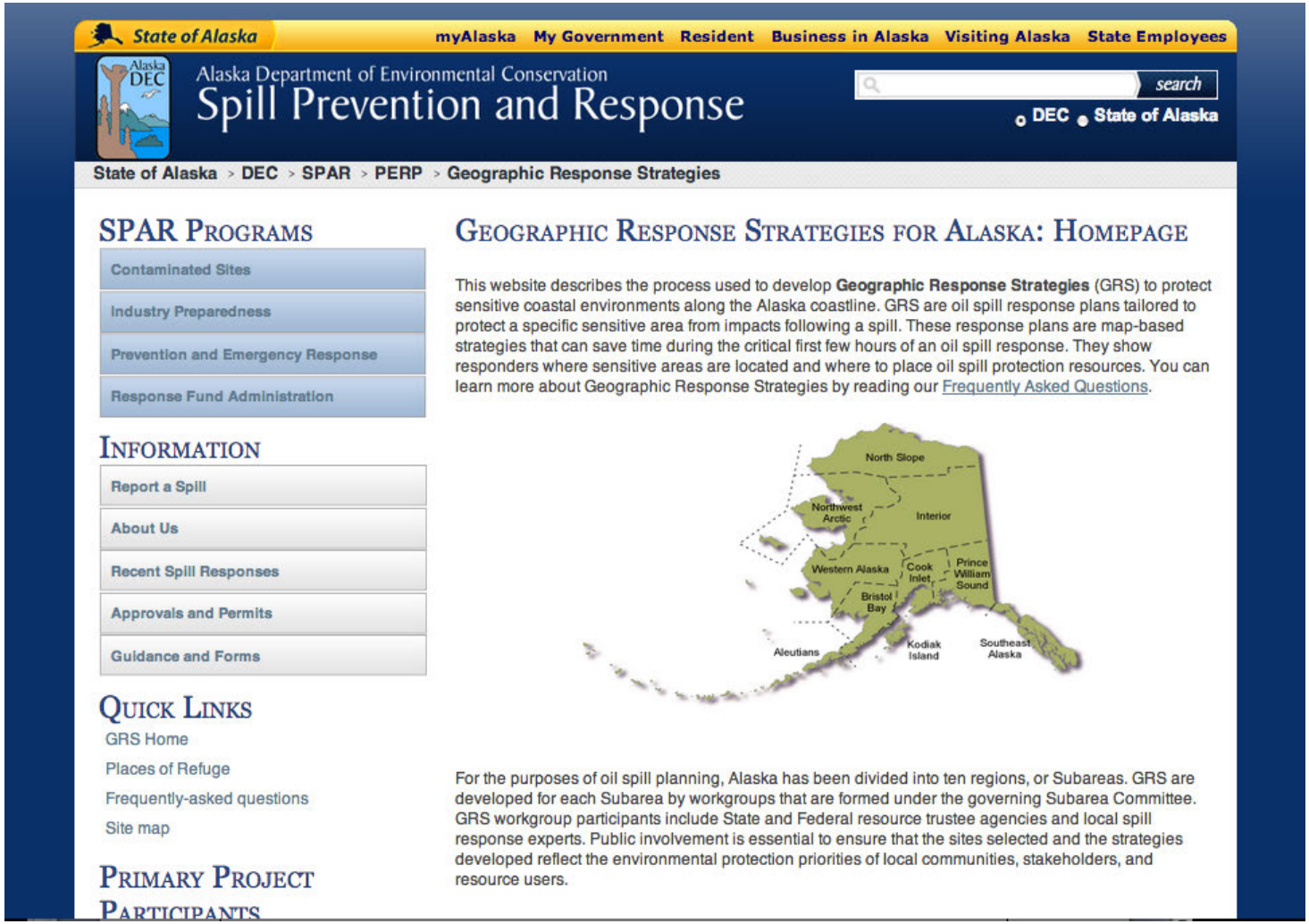
- **Maps, Charts**
- **Photos**
- **Sensitive Resources**
- **Local Knowledge**

Tactics Group

Survey team visits each site when possible

Larger tactics group reviews and edits tactics for each site

Draft GRS posted to the web page for WG review



http://dec.alaska.gov/spar/perp/grs/se/home.htm

Questions ?